

An aerial photograph of an ancient Egyptian city, likely Thebes, showing a dense cluster of mud-brick buildings and a large river (the Nile) flowing through the landscape. The city is surrounded by lush green vegetation, and the river is dotted with small boats. The title of the book is overlaid on the top right of the image.

The Archaeology of Urbanism in Ancient Egypt

*From the Predynastic Period to
the End of the Middle Kingdom*

Nadine Moeller

The Archaeology of Urbanism in Ancient Egypt

From the Predynastic Period to the End of the Middle Kingdom

In this book, Nadine Moeller challenges prevailing views on Egypt's nonurban past and argues for Egypt as an early urban society. She traces the emergence of urban features during the Predynastic Period up to the disintegration of the powerful Middle Kingdom state (ca. 3500–1650 BCE). This book offers a synthesis of the archaeological data that sheds light on the different facets of urbanism in ancient Egypt. Drawing on evidence from recent excavations as well as a vast body of archaeological data, the volume explores the changing settlement patterns by contrasting periods of strong political control against those of decentralization. It also discusses households and the layout of domestic architecture, which are key elements for understanding how society functioned and evolved over time. Moeller reveals what settlement patterns can tell us about the formation of complex society and the role of the state in urban development in ancient Egypt.

Nadine Moeller is Associate Professor of Egyptian Archaeology at the Oriental Institute, University of Chicago. She has been directing excavations at the urban settlement of Tell Edfu in Egypt since 2001. She has also participated in excavations of settlement and cemetery sites in Egypt, such as Abu Rawash, Memphis, Zawiet Sultan (Zawiet el-Meitin), the Theban necropolis, and the Valley of the Kings. Her work has been published in journals including the *Journal of the American Research Center in Egypt (JARCE)*, *Near Eastern Archaeology*, *Journal of Near Eastern Studies*, *Ägypten und Levante*, *Bulletin de l'Institut Français d'Archéologie Orientale (BIFAO)*, and *Zeitschrift für ägyptische Sprache und Altertumskunde*.

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NADINE MOELLER

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To my teacher and mentor, Barry Kemp, and in memory of Michel Baud –

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Preface

This study is the result of more than ten years of research and six years of teaching graduate seminars on ancient urbanism at the University of Chicago. My first interest in settlement archaeology arose during my time as an undergraduate student at the University of Heidelberg in Germany, where the main focus of research centered on the ancient Egyptian religion and mortuary culture. With the firm intention (and with much motivation) for delving further into ancient Egyptian archaeology, I applied in 1997 for the MPhil program in Egyptology at the University of Cambridge in order to study under Barry Kemp. With the generous support of a grant from the Deutscher Akademischer Austauschdienst (DAAD) – for which I am deeply grateful – I started the MPhil program at St. John’s College in the fall of 1998. I still remember the reading list I was sent to prepare for my first term in Cambridge, which included one of Kemp’s most influential works, entitled *Ancient Egypt, Anatomy of a Civilization*, confirming to me that this was the kind of research I wanted to pursue in my future career. After the MPhil I was accepted in the PhD program at Christ’s College and therefore remained in Cambridge until 2004. Under Barry’s guidance, I applied to work at the site of Tell Edfu in Upper Egypt, a large tell settlement that he had investigated in the late 1970s and that still had a lot of interesting data to offer in the form of Pharaonic-period settlement remains. The decision to work in Edfu came at a crucial moment and has had a great impact on the development of my career until the present time. In this respect I will forever be grateful to Barry Kemp, who was my PhD advisor and mentor throughout the formative years of my academic career. Another friend and colleague who provided much advice and support, especially during my time in Cambridge, is Kate Spence, to whom I express my gratitude. I also thank Pamela Rose, Janine Bourriau, and Will Schenck for their encouragement and first lessons on pottery.

My first season at Tell Edfu took place in the spring of 2001, and I started out with a team of two – myself and my friend and colleague Alison Gascoigne, who taught me a lot about getting around in Egypt in addition to coping with difficult work conditions. I am deeply grateful for her encouragement and support during the first season at Edfu, and I also thank Renee Friedman, who generously offered the two of us accommodation at Hierakonpolis while we worked at Edfu. In the following years, a small team was formed, with Barbara Böhm, Candy Hatherley (to whom I owe my first experience in using a Leica Total Station), and Andreas Jansen (our faithful cook). These first years at Edfu would have not been possible without them, and I am sincerely grateful to them for supporting me in my endeavors.

I continued to develop my research interest in settlement archaeology during my time at the University Oxford, where I held the Lady Wallis Budge Junior Research Fellowship at University College. I am very grateful to the Master of University College, Robin Butler, and Mark Smith at Univ for giving me a chance to pursue archaeological fieldwork and research on ancient urbanism, which laid the groundwork for being offered the position of Assistant Professor at the Oriental Institute, University of Chicago, in 2007. Over the past six years of teaching at the University of Chicago, I have been lucky to have had a number of wonderful students participating in numerous discussions about various theories and ideas concerning Egyptian urbanism, which has provided a very stimulating and fresh environment for the subject research. In this respect I thank Natasha Ayers, Kathryn Bandy, Jonathan Winnerman, Lindsey Weglarz, Janelle Wade, Jessica Henderson, Elise MacArthur, Susan Penacho, and Oren Siegel for their enthusiasm and support.

The Oriental Institute has been an invaluable resource for my research and has also offered continuous support for the Tell Edfu Project, which by 2009 had developed into a larger fieldwork project with a regular group of international archaeologists, specialists, and students. A special thank-you goes to Aurelie Schenk (Coucou), Eslam Mohamed Hassan (our *reis* for many years), Valérie Le Provost, Georges Demidoff, Daphna Ben-Tor (for all her help and support with analyzing our clay sealings), Jean-Francois Rousseau (who managed to find funding in a bleak moment in 2004), Michel Baud (a dear friend and colleague who pointed out the silo remains on site and worked at the tomb of Izi), and all the other team members who have participated in the Tell Edfu Project since 2005.

For three years (2009–2011), funding was generously provided by the National Endowment for the Humanities (NEH) in the form of a collaborative research grant – for which I am very thankful. This funding was in addition to the continuous support in financial matters and equipment that came through Gil Stein, director of the Oriental Institute. Gil also provided much advice on research questions related to ancient urbanism over the years and guided me through the tenure process, for which I am very grateful. Furthermore, I thank my colleagues here at the Oriental Institute and the Department of Near Eastern Languages and Civilizations, who never stopped believing in me and stood by me with much guidance and support through innumerable discussions: Janet Johnson, Donald Whitcomb, Robert Ritner, Brian Muhs, Emily Teeter, Chris Woods, Theo van den Hout, David Schloen, Rebecca Hasselbach-Andee, Petra Goedegebuure, and McGuire Gibson. My big thank-you also goes to Steve Camp and Mariana Perlinac, whose friendship is very precious to me. Without this tremendous help on all levels, this book would not have been possible.

I also express my deep gratitude to the members of Chicago House in Luxor – foremost my dear friend and colleague Ray Johnson, but also Jay Heidel, Tina Di Cerbo, Brett McClain, Jen Kimpton, Krisztián Vértés, Julia Schmied, and Keli Alberts. For the past seven years, the advice and training in epigraphy they were able to provide to the students has been invaluable. In addition, by always offering us a place to stay and keeping a large amount of our equipment, Chicago House has truly helped us in many ways to continue our annual seasons at Edfu, while at the same time providing a “home” for us in Luxor. They also kept our morale going with various festive occasions in the fall, such as for Halloween and Thanksgiving.

Toward the final stages of preparing this manuscript for publication, I thank Beatrice Rehl and Asya Graf (Cambridge University Press) for all their time and effort in making this publication possible, in addition to the numerous friends and colleagues who were very generous in allowing me to use their images and illustrations: Mark Lehner, Wilma Wetterstrom, Daniel Polz, Felix Arnold, Joe Wegner, Barry Kemp, Manfred Bietak, Irene Forstner-Müller, Ernst Czerny, Renee Friedman, Dieter Eigner, Zoltán Horváth, Joachim Śliwa, M. Chłodnicki, K. M. Ciałowicz, Michel Valloggia, Georges Soukiasian, Clara Jeuthe, Miroslav Verner, and Cornelius von Pilgrim. I also sincerely thank the American Research Center in Egypt (ARCE) for awarding me an AEF grant to support the publication of the numerous plans and figures in this book, which is crucial for this kind of study. And of course I also owe many thanks to Topy Fiske who did the first editing and to all the other people involved in the final production processes of this book, especially Sathishkumar Rajendran and Lois Tardío.

Last but not least, I owe a lot to Gregory Marouard, my husband and codirector of the Tell Edfu Project, who supported me in many ways throughout the writing of this book and in sharing the burden of running a project of the scope of the excavations at Edfu. His time and effort in helping me with the final preparation of the illustrations for this book have been considerable. I also thank him for all his moral support and patience over the years, especially during the tenure process.

Introduction

ANCIENT EGYPTIAN SOCIETY HAS MAINLY BEEN INVESTIGATED THROUGH THE LENS OF its rich and well-preserved mortuary culture, which has been taken as a representative reflection of the nature and organization of this early complex society.¹ The emergence of social complexity has also been evaluated through the analysis of mortuary remains and practices, especially the study of cemeteries and the evolution of burial customs. The rich archaeological as well as textual data from ancient Egypt has made such a research approach feasible and logical. Attempting to investigate Egyptian society from a different angle, through its system of settlements, is a much more challenging project but offers the advantage of providing a first reliable basis that can then also be used for cross-cultural comparisons. This current study constitutes a major step toward a better understanding of urban society in ancient Egypt based on the growing amounts of data available from ancient settlements through archaeological fieldwork over the past two to three decades. The aim is not to develop new urban theory but to provide a solid and consistent foundation for comparative studies on ancient urbanism and early complex societies.

One of the important questions that will be addressed in this study is whether ancient Egyptian society can and should be considered an “urban society.” The opinions on this matter are divided and demonstrate the existing challenges of dealing with the complex evidence and incomplete data. It is the aim to advance questions about the characteristics and the evolution of the ancient Egyptian settlement system over a considerable stretch of time encompassing periods of centralized and fragmented political control, which will help to enhance our understanding of ancient Egyptian society on a much wider scale and promote a perspective that it is not exclusively based on its mortuary culture.

Closely related to these issues concerning the character of the settlement system in ancient Egypt is the role of the state, which has been interpreted in older publications as an all-encompassing and deeply influential factor of Egyptian society. Newer research has indicated that the role of local administration and settlement networks should not be understated.² For example, Christopher Eyre and Mark Lehner have argued that the ancient

Egyptians were for most parts of Egyptian history essentially a village society in which the centralized state made use of an already existing settlement system without generating and imposing order in the way of a new urban form of settlement but rather taking advantage of a pre-existing and self-regulating network of towns and villages.³

The current study has the aim of shedding light on the inherent urban character of ancient Egyptian society, which can be traced back to the Predynastic Period when towns showing urban features started to appear along the margins of the floodplain and in the Nile Delta ([Chapter 4](#)). Although size and population density are not necessarily the decisive criteria for defining the urban character of Egyptian settlements (see discussion in [Chapter 1](#)), the role and function of many towns as well as the complex network and hierarchies within the settlement system in Egypt cannot be ignored. The notion that the state and the emergence of urbanism might not be directly dependent on one another arises because early urban centers (e.g., Hierakonpolis in the south of Egypt)

seem to have existed before the unified territorial state took control of the entire country. It appears that the central government realized the potential of integrating the existing settlement system into the wider administrative system through establishing a number of official institutions. The Old Kingdom period shows various attempts by the central authorities to achieve a better economic but also ideological integration of the large territory that was governed by the king and its court residing in the Memphite area.⁴ An interesting glimpse of the evolving urban society less overshadowed by the control by the state can be found during the First Intermediate Period, which shows evidence for flourishing provincial capitals managed by local elites. The fact that the settlement system did not decline during this time (see [Chapter 7](#)) can be taken as strong evidence for a relatively stable urban society whose administrative practices and economic basis on a regional level were successfully maintained by a local elite.

Lehner takes this approach further and proposes to investigate the Egyptian civilization within the theoretical framework of a complex adaptive system (CAS) and the patrimonial household model.⁵ The former concept is based on the broad principal that a variety of systems taken from the biological and social sciences indicate that local interactions can lead to the emergence of complex global patterns.⁶ Although it is often impossible to isolate and fully comprehend each local interaction and its precise consequences that generate a particular complex system, it is useful to focus on the system as a whole – including global patterns that might become discernable – but also to investigate multiple levels that do not necessarily follow a specific hierarchy.⁷ As Lehner recognizes, Egypt makes an excellent case study for a complex adaptive system in view of it being a typical example of an early-centralized nation-state that was based on a large network of towns and cities spread along the Nile Valley and the Delta region.⁸ In order to better define social complexity in Egypt, it is certainly useful to move beyond the traditional approach of investigating the different facets of ancient Egyptian society through the lens of central state control. When analyzing the large amount of archaeological and textual evidence, it is evident that such control was much more dispersed and that there were many levels within the social fabric that need to be taken into account and adequately addressed. Analyzing the archaeological evidence from towns and cities that sheds new light on their layouts and overall organization down to the smallest units – i.e., the domestic

houses and their inhabitants – has the possibility of providing a much more comprehensive picture of urban society and its inherent hierarchies than has been achieved in the past. Previous studies have had the tendency to focus too exclusively on the role of the central government and the highest elite, investigating socioeconomic aspects of Egyptian society from the angle of state control and the redistributive system.⁹ The CAS approach, on the other hand, has the advantage of including aspects on possible modes of decision-making processes used by the inhabitants on a local but also national level.

The patrimonial household model, on the other hand, propagates a “bottom-up” approach to the investigation of the ancient Egyptian state as “extended households-of-households.”¹⁰ While this model seems an attractive approach for analyzing ancient Egyptian society, there is evidence that it evolved beyond the limits of the household unit. Already by the second half of the third millennium BCE, there is evidence for the existence of towns with some elements of the population seeking employment beyond their close kinship ties. Key evidence for the emergence of an “urban proletariat”¹¹ comes from the first settlements that were founded by the state and whose inhabitants constitute a variety of social groups in the service of official institutions that had been set up by the state in order to administer its growing economic needs in relation to establishing and maintaining royal mortuary complexes. As will be outlined in [Chapter 5](#), the first evidence for the central government taking advantage of the existing settlement system and beginning to manipulate it to its own advantage dates back to the Old Kingdom.

The goal of this study is to trace the development of Egyptian urbanism over a critical period of time, from the beginnings of complex society and the formation of the centralized state at the end of the fourth millennium BCE to the end of the Middle Kingdom, including the transition into the early Second Intermediate Period (ca. 1650 BCE).¹² This 1,800-year time frame allows us to examine the origins of urban society and to compare periods of strong centralized state organization, such as the Old and Middle Kingdoms with the First Intermediate Period, a time of political fragmentation ([Table 5.1](#)). In addition, it provides an excellent opportunity to investigate long-term cycles and fundamental characteristics that define urbanism in ancient Egypt and allows for an understanding of the degree to which settlement development was affected by political, administrative, and socioeconomic changes.

The Predynastic and Early Dynastic material will provide valuable insights into the beginnings of the urban evolution and will allow us to trace the appearance of key elements such as temples, town enclosures, buildings of official character, and palatial complexes in settlement sites in the Nile Valley and the Delta. Within the current framework, it is important to consider the urban environment in Egypt as an evolving system encompassing both planned and “organic” cities interacting with rural estates and village communities, all within the overarching aegis of a centralized state apparatus during periods marked by powerful kings and a stable administrative and economic system such as can be recognized for the Old and Middle Kingdom periods. Nevertheless, the degree of influence on and involvement of the state in the existing settlement system can best be evaluated at times when the royal power was weakened, such as during the First and Second Intermediate Periods, which offer further insights on the development of towns and cities during periods of political fragmentation.

One especially important aspect of Egyptian urbanism from the Old Kingdom onward is the role of state-planned and state-founded settlements. The evidence shows that the central government was quite invested in establishing an efficient network of settlements that would support the economic and administrative goals of the country. There seems to have been different strategies employed – and one could say “experimented” with – by the central government; certain measures clearly evolve gradually over time until the New Kingdom, when temples can be considered the most powerful economic institutions in the country. For example, there is good evidence that the central government started out with a system of high administrators that were sent to different towns in the country in order to take control of the administration of entire provinces – so-called nomarchs – during the third millennium BCE, which was replaced by the time of the Middle Kingdom with a system of local majors and governors residing in the provincial capitals who were often members of local elite families.¹³

State-founded settlements can in many cases be recognized by their strictly orthogonal organization and repetitive pattern in house plans, but they also give an opportunity to see how the higher level of administration envisioned a settlement and its layout. These much more artificially conceptualized settlements provide a unique chance to understand how an inherently urban society conceived and made abstractions regarding town planning.¹⁴ Such sites not only shed light on what the ancient

Egyptians saw as necessary elements of a town but also provided a self-reflection of their own society, following to some extent an idealized vision. Practical concerns also influenced overall planning, such as using space along the interior of town walls for larger storage installations or accessing major silos, which held a settlement’s grain reserve. It is important to consider why the state founded a settlement and to learn how this primary purpose might have evolved into something else by the end of its occupation under the influence of its inhabitants. The comparison between state-founded settlements and organically evolving sites is an interesting one and allows for a much better understanding of the nature of urbanism and urban society in ancient Egypt as a whole. Although this comparison offers an exciting angle for current research, other questions concerning settlement size and population density are more difficult, if not impossible, to answer based on the available evidence. Therefore, it is important to recognize the limitations and at the same time emphasize the potential of the archaeological data from these sites. As will be seen in the chapters analyzing selected examples, this research, based as much as possible on the latest results from recent archaeological fieldwork, will provide fresh insights into the characteristics of urbanism in ancient Egypt during the subject time period.

Furthermore, it is important to point out that the archaeological evidence for settlement sites that fall within the selected time frame of this study is quite unbalanced. Archaeologists not only have focused on very different research questions and employed a variety of methodologies during each fieldwork project, but they are also subject to the preservation of settlement remains, which can have a large impact on what has been possible to explore at a given site. The current study has made a deliberate choice of sites from which adequate qualitative and quantitative information is available in order to respond to the main research questions and to be able to conduct an in-depth analysis of the data. The settlements treated here are by no means a complete catalogue of all known sites dating to the chosen time period, but rather reflect a distinct choice by the author. The choices have been governed by the quality and availability of data for each respective settlement. As noted previously, the archaeological data is unevenly spread across different periods and was retrieved using a variety of methodologies, in addition to which the specific research objectives have had a considerable effect on the way the information has been published. As much as possible, a set of core questions investigating the nature and development of

settlements will be addressed for each example in this book, but in some instances there might be larger gaps in the data, resulting in a much more varied presentation not always appearing as a coherent analysis when comparing one site with another. Regional distribution of available evidence can be quite problematic too, which means that for some areas in Egypt numerous sites are known (as is the case for Upper Egypt), while for other regions (such as Middle Egypt or the Delta) there is little evidence at all for certain periods even though it is clear that they had been part of the overall settlement system.¹⁵

For the early settlement at Hierakonpolis, there is a great wealth of published data, which allows us to trace the evolution of this major regional center from its beginnings in the Predynastic Period to the early Old Kingdom (see [Chapter 4](#)). Other settlements of the same period only offer a limited amount of data for early ancient Egyptian towns, which makes Hierakonpolis the dominant example and closer inter-site comparisons difficult. Much attention should be paid to the integration of the geographical parameters and the natural environment that characterize each settlement. At Hierakonpolis, data was collected through excavations, surveys, and drill cores, which provide a relatively large spectrum of information covering many aspects of life at this important town. Other sites, such as Elephantine in the far south, have occupational remains spanning most of ancient Egyptian history, but the amount of information for the different settlement phases can vary considerably from one period to another. There is a good overview for the early Old Kingdom period, but the late Old Kingdom is less well represented due to the relatively small areas of exposure accessible beneath much-later settlement remains. Nevertheless, Elephantine is one of the best-explored townsites in Egypt. Similarly, there are other places that can provide much data for one specific period that has been the focus of fieldwork, whereas it is impossible to evaluate the development over time and conduct intrasite comparisons. As a consequence, the current study is dependent upon the availability of data, which is spread unevenly across different time periods and regions. Therefore, it is not always possible to provide an assessment that measures up to the precision one would like to achieve in the evaluation of settlement patterns and the hierarchy of settlements on a broader basis throughout the Nile Valley and Delta and in a complete diachronic order.

The following topics will be evaluated as far as possible for each selected site, starting from the Predynastic Period until the end of the Middle Kingdom/early Second Intermediate Period. Local topography and landscape settings are important parameters that have not only an effect on the physical appearance of settlements but also influence the evolution and growth over time. Major urban centers can frequently be found in regions that have had an advantageous access to important trade routes, quarries, and mining sites in the desert. Furthermore, there are urban areas that developed into centers of national religious importance – such as is the case of Abydos with the cult of the god Osiris, the god of the afterlife, whose cult focused on an important processional route from the Middle Kingdom onward, attracting pilgrims from the entire country. In the following times, major temples and places for worship and even some royal funerary monuments were erected within the vicinity of a flourishing provincial town expanding along the desert edge.¹⁶

The role of towns and cities within the wider network of sites in Egypt on a national and local level will also be reconsidered. This can be achieved through the investigation of the evolving presence of local elites managing their towns as well as their link to the royal court and also to the existing hinterland. Closely related to such points of inquiry is the layout of each settlement and the possible identification of official structures and institutions such as the main temple complex and related sanctuaries and chapels, administrative buildings, and storage facilities that go beyond private storage efforts, to name just a few. Further defining elements are the presence or absence of a system of enclosure or perimeter walls around the site. The organization of domestic quarters and house layouts – identifying local traditions, characteristics of social patterns, and changes in local family units – clearly reveal the private aspects of daily life in towns and cities.

It is the aim of this study to provide the first in-depth analysis of the urban elements within ancient Egyptian society, an analysis based primarily on the archaeological evidence. As will be outlined in [Chapter 1](#), there have been several attempts to apply theoretical models to the settlement data from the Pharaonic period and to integrate our knowledge from key sites such as Tell el-Amarna, Deir el-Medineh (Theban West Bank, opposite modern Luxor), and Lahun ([Figure 8.1](#)) into the larger framework of comparative studies on ancient urbanism. These efforts have not met with much success in the past, mostly because of insufficient data available

for questions about settlement size and population numbers. Several studies exist that provide some estimates concerning these issues, but their validity remains questionable. The other main reason it has been difficult to use Egypt as an example of an early urban society in comparative studies is the apparent lack of relevant publications. There are many archaeological site reports that present field data in great detail, but there are often no or few attempts to analyze this data within the overall settlement system and its role within urban society. Although there is much information from a microlevel perspective, there are few intersite comparisons. Thus, scholars working on a comparative level and outside the field of Egyptology or Egyptian archaeology often encounter difficulties using data from Egypt for their analyses. As will be shown in [Chapter 1](#), this has led to an increasingly noticeable trend of ancient Egypt being omitted in studies on urbanism in antiquity, which the current book attempts to remedy. It is the aim of this research project to provide a precise framework for future evaluations and analyses of new archaeological data from Egypt as well as to explain how urban society functioned and how it was affected by cultural and political changes. In addition, this research will provide a new opportunity for comparative and theoretical studies on ancient urbanism and include the example of Egypt in a meaningful way – an approach not based on rough estimates and speculation but rather on recovered data from intensive archaeological fieldwork.

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Ancient Urbanism and the Case of Egypt

1.1 GENERAL CONSIDERATIONS RELATING TO URBANISM IN EARLY CIVILIZATIONS

Understanding the ancient Egyptian civilization as an example of the early pristine states that emerged seemingly independently in different parts of the world at different times is an important starting point for investigating urbanism and urban society. The project on early complex societies launched recently by the Santa Fe Institute provides an interesting and innovative theoretical framework through which to investigate a variety of characteristics and identify universal patterns that seem to be shared by these early states.¹ This research is ongoing and has been drawing on many fields, bringing to together a vast quantity of archaeological data, which is being entered into a single database with details on economy, trade, agriculture, climate and environmental factors, demographics, disease, and any other relevant information that can be linked to early states. This will form the key data from which future models and simulations on different levels will be developed, with the aim of shedding light on the various mechanisms at play that lead to state formation.² This approach is certainly very innovative in its nature and, by bridging disciplines and involving leading specialists not only from the various areas but also including mathematicians and modeling experts, the outcome in the future will certainly be extremely interesting. But for now, we will have to content ourselves with the more traditional approaches to understanding early urbanism.

There have been many general works published about urbanism in New and Old World ancient societies that use descriptive and theoretical criteria that can be applied in one way or another to almost all of them. However, within each civilization, specific elements can be detected

that necessitate the definition of the different types of urban settlement.³ When comparing them, it is noteworthy that the pathways in which these urban societies evolved were greatly influenced by their cultural and geographic specificities.⁴

In his essentially comparative approach for analyzing early civilizations, Bruce Trigger lays out the principal characteristics for urban centers along two trajectories: those that occurred within city-states and others that were part of territorial states.⁵ This approach emphasizes that, while some basic features of the urban system can be found in both, there are a number of noticeable differences between the two groups. Although “urban society” and “the state” are not necessarily dependent entities, George Cowgill was able to demonstrate that “the state” is not a prerequisite for urbanism.⁶ Despite such criticism, the two trajectories laid out by Trigger provide a useful angle from which urbanism can be investigated. He points out that the presence of urban centers is a common characteristic of all early civilizations, but it is the nature of urbanism that differs in each case.⁷ In his comparative analysis of urbanism in territorial states, Trigger identifies a certain hierarchy within the settlement network, which is based not on size but on function. Urban centers occurred on various levels and were inhabited by a recognizable urban society that contained an elite of administrators and priests, people who could be considered more as part of a “middle class” engaged in craft manufacturing, and also workers who were engaged in production.⁸ By distinguishing the specific character of urban centers in “city-states” versus those of “territorial states,” it is finally possible to move away from several attempts to adapt methodologies and definitions that proved successful – for example, in Mesopotamian

archaeology, such as the key analysis of settlement patterns by Robert McC. Adams – but are less applicable to ancient Egypt.⁹ Adams was able to include a large amount of survey data from his fieldwork for the study of the Mesopotamian settlement system, which allowed him to trace the interactions between the major city-states and their hinterlands as well as the evolution of land use throughout various periods of Mesopotamian history. However, using his work as a viable model for ancient Egypt is not possible with the current available data, and it is also difficult to make comparisons because there is no region within the Nile Valley or Delta where a representative sample record of settlements for any given period has been obtained that includes the full spectrum of towns, villages, and estates that would have been present in Pharaonic-period Egypt.¹⁰ In addition, there is little environmental data relating to settlement patterns and the organization of canals and fields, and almost nothing is known about the villages based on archaeological sources.¹¹

With the increasing amount of available evidence, Egypt as an urban society needs to be reconsidered and the precise nature of Egyptian urbanism defined. Trigger emphasized that many definitions trying to capture the essence of ancient urbanism are looking at the quantitative aspects – for example, size and population density. Such definitions are not conducive to conceptualizing the nature of urban societies of early civilizations and “rarely contribute to a better understanding of urban phenomena.”¹² The inherently functionalist assumption adopted by a large number of scholars, that settlement size is linked to qualitative variations and the complexity of the inhabitants’ social structure, needs to be revised.¹³

In its most basic form, urban society can be described as a “society with cities.”¹⁴ Such a definition has the advantage of avoiding a too-rigid differentiation of urban versus rural society, a dichotomy that should be regarded as insufficient for including many of the nuances that fall between these two categories and one that necessitates more flexibility than is expressed by these two terms.¹⁵ In its most general terms, urban society in ancient Egypt is defined here as the element of the population that is exposed to the presence of urban centers and experiencing the existence of urbanism within the overall settlement system. Barry Kemp observes that the emergence of urban centers evolved rather slowly through the third millennium BCE; even though a significant part of the population lived in towns, in terms of size, the centers remained relatively small.¹⁶ The fortified town wall and “public architecture” are certainly

important urban elements, although the latter often remains restricted to the main temple, especially for most of the third millennium BCE.

Cowgill points out in his comprehensive study on the origins and evolution of urbanism that it is crucial to provide clear definitions that are culture-specific in terms of what constitutes a “village,” “town,” “city,” and “urban center” and what is meant by “urban society.”¹⁷ Although these terms are commonly applied on a broad basis to ancient and modern civilizations, the lack of definition can be problematic because of the inherent cultural differences and traditions that shape these concepts and that pertain to any attempts at cross-cultural comparisons. Cowgill provides a broad definition that he intends to be universally applicable, but one that needs to be refined according to culturally specific criteria: a city is “a permanent settlement within a larger territory occupied by a society considered home by a significant number of residents whose activities, roles, practices, experiences, identities, and attitudes differ significantly from those of other members of the society who identify most closely with rural lands outside such settlements.”¹⁸ He further specifies that “cities are typically political, economic, and religious centers for a surrounding territory and loci for wider ranges of specialized production and services than are found elsewhere in the region.”¹⁹ Along similar lines Paul Wheatley presents a definition in his study of the Islamic city that fits well with the evidence from ancient Egypt because it is less defined by quantitative factors and more by function: “A city comprises a set of functionally interrelated social, political, administrative, economic, cultural, religious and other institutions located in close proximity in order to exploit scale economies.”²⁰ Apart from the city creating a stage of economic interactions, the impact on society of creating “effective space” through these urban institutions should not be underestimated and might have acted as a catalyst for bringing together wider regions and different segments of society.²¹ Wheatley also emphasizes that these institutions “have combined in different ways in different cultures and at different times” and that the emergence of state institutions is intrinsically linked to the emergence of urbanism in early societies.²² Trigger evaluates the attempts to place paradigms of the preindustrial city on a single continuum and concludes that, while it is possible to identify key variables that tie them together, the variables combine “to shape an indefinite number of trajectories or paths of pre-industrial urban development, any one of which may be

associated with a particular civilization.”²³ He identifies three variables that can be recognized as having played an important role in the emergence of urban centers in preindustrial societies and in the determination of the size and layout of settlements as well as the composition of the population within the urban settlement. One of the variables is the degree of economic complexity, which takes into account factors such as the degree of labor division and craft specialization and the number of people who are not primarily involved in food production. Trigger recognizes that the latter case might include only a relatively small proportion of the inhabitants within most ancient cities, but he emphasizes that it is the larger number of people being connected through routine economic interactions that makes such populations stand out from nonurban settlements.²⁴ Another factor he identifies as being important in this context concerns the process and strategies employed by the inhabitants of urban settlements to procure food resources and supplies from their hinterland. This aspect is more clearly recognizable in the case of Mesopotamian city-states, where a large part of the urban population also cultivated the land around the cities during the third millennium BCE. For Egypt, this is much harder to grasp because most of the available sources that provide information about obtaining food and agricultural produce in terms of supplies refer to the highest elite contexts and the palatial administration of the king through a centralized administrative network and the procurement of such supplies through a rigid system of taxation. There are almost no sources that address the relationship of the city dwellers to the hinterland of their cities.²⁵

A third variable presented by Trigger relates to the political context within which cities occur.²⁶ Although this factor certainly contributed to shaping the layout and size of cities, the geographical setting and landscapes in which early states formed play an important role as well. Egypt has always been the kind of nation-state where cities were spread out in regular intervals at suitable locations – within the Nile Valley and Delta regions – being interconnected especially via the river and its branches and canals.²⁷

These variables are important considerations to take into account for analyzing the urban settlement system of ancient Egypt and can be used as first guidelines and an initial theoretical framework for defining urbanism and urban society. The aim of the current study is to provide a concise working definition of the factors and elements that shaped urban life in this

early civilization and to establish a list of categories that may be assigned to different urban and nonurban forms of settlement – one that retains the ability to show the nuances that can be recognized among the different types of settlements encountered in the archaeological record.

In principle, people who are part of an urban society belong to a wider spectrum of social groups and have experienced or are directly experiencing urban conditions and lifestyles that differ from those of their rural counterparts in complexity through the hierarchy, administration, economy, and engagement in non-food-producing occupations. However, this contrast to “rural society” does not take into account certain subtle differences that seem to be typical for ancient Egypt. From the archaeological evidence, especially small finds in the form of tools or private storage installations, it is possible to deduce that a certain number of inhabitants of an urban settlement were also involved in agricultural activities or at least possessed and exploited agricultural land. It is also possible to encounter, through biographical inscriptions, urban dwellers who probably not only lived within a town but also owned property in the countryside.²⁸

This means that it is not a prerogative for members of an urban society to live in urban centers as such, but rather that their urban experience shapes the lives within their respective social environments. This not only can happen on the basis of social hierarchy and organization but also on a socioeconomic basis. One example of members of an urban society being present in a nonurban settlement can be found in those who were linked to the royal mortuary cults in the Memphite region during the Old Kingdom. In this case, a large number of people lived on a permanent or semipermanent basis in complex and specialized settlements that fall into the category of state foundations with nonurban character, as they did not possess some of the principal characteristics that define an urban settlement in Egypt (see [Section 1.3.4](#)). The best illustration of this type of situation is the town at Heit el-Ghurab at Giza, which brought together different sectors of Old Kingdom society for the purpose of administering and organizing the construction work linked to the various royal pyramid complexes nearby.²⁹ A certain degree of social complexity is clearly present at this settlement, which can be recognized by variations in house layouts and evidence for administrative tasks, manufacturing activities, and food production being carried out in discrete areas of the settlement. The complexity of social organization as reflected in the spatial distribution of the

settlement is also confirmed by a marked variation in diet and food consumption noticed in the different habitation zones.³⁰

The political role a town played within the larger settlement system of any given ancient society is not necessarily linked to its economic role.³¹ Settlement growth and evolution can be dependent on political, social, ceremonial, and economic factors, not all of which are mutually exclusive. These factors are also not static, but rather are in a constant flux of change and redefinition, especially during transitional periods that were characterized by major political and cultural changes. One such period occurred at the end of the third millennium BCE in Egypt, when the centralized state of the Old Kingdom fell apart and was replaced by a much more regional system that saw the appearance of local styles and variation, especially noticeable in the material culture.

The economic system as well as the political context certainly had a major impact on the evolution and the creation of different types of settlements within Egypt. For example, during the third millennium BCE, the centralized state controlled much of the resources through mechanisms that assured regular income in the form of taxes from agriculture and farming activities, the prerogative to exploit raw materials, and authority over most of the important trade networks. The state was invested in the construction and maintenance of large royal mortuary complexes, which it achieved by integrating the mortuary temples within the wider economic network. This had two principle effects on the settlement system: one, the endless creation of royal domains and estates in the agriculturally exploitable regions, especially the Delta. Probably a fair amount of them were refoundations of existing villages and hamlets whose inhabitants were paying state taxes in the form of animals, produce, and grain from their annual harvest.³² This is known from the relief scenes depicting domain processions, which have been found at the mortuary temples and causeways in the Memphite necropolis showing lines of people bringing these goods from the domains to the institutions.³³ While the creation of domains must have had some significant impact on the local communities in terms of their economic status, it is evident that they continued to function on the local level, according to their established household and kinship patterns, probably without experiencing drastic changes in daily life.³⁴ The state interfered to a certain extent in people's lives based on economic considerations, but there is no

evidence that it changed the essence and character of these rural communities.

Second, it can be noted that there was a population influx toward these royal funerary complexes in the Memphite region, which attracted large numbers of people on a permanent and semipermanent basis. Excavations at Giza have shown that the large town recently discovered at Heit el-Ghurab is the direct result of a new state foundation consisting of three distinct settlement quarters (the Gallery Complex, the Eastern Town, and the Western Town). The inhabitants of the Eastern Town mostly appear to have been self-organized and closely connected to food production and supply tasks, whereas the Western Town was inhabited by an elite involved in administration. The Gallery Complex seems to have provided temporary accommodation to the large workforce being employed in the construction work on a rotation basis. Thus, different social groups came to inhabit discrete neighborhoods of an essentially state-founded town.

1.2 THE CASE OF ANCIENT EGYPT³⁵

1.2.1 Problems of quantitative factors

Before delving into further specifics that can be deduced from the archaeological evidence recovered during surveys and excavations of ancient Egyptian settlements, it is useful to briefly present the issues that are encountered when pursuing a definition according to population numbers and settlement size. These two variables have been frequently regarded as necessary for any evaluation of the urban system, but the shortcomings of this approach are clearly recognizable in several studies in which attempts have been made to use quantitative criteria such as settlement size and hierarchy as well as population estimates.³⁶ The data needed for any reliable assessments along these lines is difficult to come by from the archaeological record alone, especially as most sites have not been fully excavated. Parts of settlements can be missing in the archaeological record because of destruction (agriculture, *sebak* digging, etc.) or are beyond reach for any kind of fieldwork (e.g., covered by modern settlement or thick alluvial deposits), which can make precise estimates about the maximum size difficult.³⁷ This is specifically problematic for *tell* sites that consist of a multitude of superimposed occupation levels; and while the maximum size of a tell can often be determined through satellite images and survey work, the size for

any specific phase of occupation is harder to define. Thus, the evolution of a settlement through time and the effect of long-term political and socioeconomic changes can be established only in exceptional cases. A rare example of a successful study in this respect is the site of Buto in the Nile Delta. The size of the three adjacent mounds that characterize the site have been known for a long time and are visible on satellite imagery, but the exact dimensions of the town during the different Pharaonic and post-Pharaonic periods have only recently been established – with the help of drill core sampling and the implementation of a new survey method.³⁸

Population density and numbers also have limitations in relation to Egyptian settlements, because household sizes are mainly rough estimates. Kemp uses a census list from the settlement of Lahun in the Fayum region to investigate household size in Middle Kingdom Egypt, allowing him to trace the evolution of a single household over several generations.³⁹ From the initial couple founding a household, it grows to nine persons, including the core family consisting of the couple and their children and additional female relatives. By the time the census list had been drawn up in the name of the son who inherited the position as head of the household, it had shrunk to six persons. Another document from the same site lists a core family of three persons and seventeen servants, who also were considered part of a single household. Dominique Valbelle assigns both families to the “middle class” of officials living at Lahun during the late Middle Kingdom.⁴⁰ Similar census lists are known for the late New Kingdom occupants at the workmen’s village of Deir el-Medineh.⁴¹ These lists show that the official recording of households for administrative purposes on a regional, and probably national, level existed at least from the Middle Kingdom onward, but few documents have survived. What is missing from these sources is any link to specific domestic buildings, and it is not possible to determine whether all household members occupied a single dwelling or several neighboring houses of smaller size that were located in the vicinity of the large ones.⁴² What the papyri do tell us is that a household contained not only members and relatives of a family but also staff and servants, thus expanding beyond the core family.

In this respect, the ethnographic study by Raoul Naroll can be useful for estimating the number of occupants in a house more precisely.⁴³ He investigates floor plans of domestic buildings and population numbers in eighteen societies from different parts of the world, and despite the obviously strong cultural differences and variety in the

social organization of each, it is possible to deduce that about 10 m² per person of dwelling floor space was assigned on average. This formula received varied criticisms and refinements in terms of how precisely it is possible to identify dwelling floor space in ancient cultures and what factors can lead to errors in the prediction of the number of inhabitants within a given dwelling.⁴⁴ Despite the caution necessary for such generalized calculations, Barton Mc. Brown demonstrates in a revision of Naroll’s study that it is possible to predict about 6 m² per person in relation to the floor area within a house, on a worldwide level and rough scale. Thus, an estimate between 6 and 10 m² per person can provide a more precise approximate figure for buildings that are difficult to assess than depending on architecture and material culture alone, such as has been the case for the barrack-style living units at the western settlement of Qasr el-Sagha, which is situated in the Fayum region.⁴⁵

Identification of domestic living space within a given building can also be problematic. It is especially complicated when there is evidence for upper floors and the use of roof space, which is not always clearly identifiable and quantifiable in the archaeological record. Therefore some uncertainty is inherent in any calculation of floor space and the number of inhabitants, such as those proposed by Naroll and Brown. This can also be illustrated by traces of stairs found in domestic buildings in Egypt, which could lead to the roof or to an upper floor⁴⁶; the distinction between the two is not always clear. In addition, the use of such upper floor space cannot be assigned with much certainty to specific functions and uses. Kate Spence suggests that an upper floor could have been used as a private family room by the entire family or specifically by women.⁴⁷ If the space on the roof was not properly built as a covered space, it could have been occasionally used for sleeping during the hot summer months or for storage and food preparation. Accessible roof space or a second floor was unlikely to have covered the same area as the underlying first floor, especially when the dwelling had a central courtyard. The possible existence of wind-hoods above bedrooms constitutes another situation in which the roof would not have been fully accessible.⁴⁸

An additional aspect dealing with the evaluation of domestic living space is the constant rebuilding and changes within houses, which were often divided into smaller units over their lifetime, mainly due to inheritance matters. The evolution of a domestic town quarter at Elephantine from the early Middle Kingdom into the Second Intermediate Period has contributed significantly

to our understanding of the ever-changing layouts and sizes of domestic buildings, which were constantly evolving, being subdivided, or being enlarged and thus adapted to the needs of the household.⁴⁹

Equally difficult are the attempts to calculate the storage capacity of a settlement's grain storage facilities and inferring from ration sizes how many people could have been fed from them. These calculations are valuable for estimating food supply and redistribution but are much more problematic when trying to deduce overall population numbers.⁵⁰ It is clear that for most inhabitants in a settlement, rations did not make up the full subsistence – only parts of it.⁵¹ One of the rare sites for which some estimates as to population numbers have been published is the New Kingdom capital at Tell el-Amarna, which was a short-lived city under the reign of King Akhenaten at the end of the Eighteenth Dynasty.⁵² The number of inhabitants might have been between twenty-five thousand and fifty thousand persons, based on the carrying capacity of the assigned hinterland, which is marked by a series of boundary stelae.⁵³ This is currently one of the best estimates for an ancient Egyptian city, and Amarna has the advantage of having been a short-lived capital for which the full size and the number of houses as well as institutions and palaces are quite well known from the archaeological record.

Within the framework of the current study, settlement density – regardless of whether for villages or urban centers – needs to be addressed as well.⁵⁴ In Egypt, settlement density is, among other factors, closely related to the natural environment in which the respective settlement is situated. The ancient town at Elephantine in the south has always been quite compact and densely occupied, with houses being built against each other, sharing common walls, from the Early Dynastic Periods onward. This circumstance is heavily influenced by the town's island location in the First Cataract region and the restriction of space that could be safely settled without being endangered by floodwaters. The natural environment of a perennially flooded river plain has a considerable impact on how tell sites evolve and expand.⁵⁵ On the other end of the spectrum, there is also evidence for settlements along the desert margins, which did not have the same restrictions as those in the floodplain – for example, in the case of the settlements at Abydos and at Tell el-Amarna. The latter took advantage of a large natural bay and was spread out over an area of more than 6 km in length from north to south, with a maximum width of 1 km in its center, thus covering between 300 and 600 ha. It had quite a considerable

variation of more densely settled neighborhoods and those that were much more loosely organized.⁵⁶ The organization of different quarters made up of domestic houses seems to have been much influenced by socio-economic factors and less by spatial restrictions.⁵⁷ This situation also indicates that the presence of a variety of quarters within a settlement can be good evidence for a certain degree of social complexity, indicating urban status.

While tell sites in the Nile Delta are still the main form of settlement being founded on sandy *geziras*, or so-called turtlebacks, there are cases such as that of Tell el-Dab'a in the eastern Delta where town quarters would spread out between the active river branches and between natural lagoon-like areas that functioned as harbors.⁵⁸ The density of domestic buildings varied considerably from the Twelfth Dynasty up to the Second Intermediate Period at this site. These examples illustrate quite well that different levels of density and compactness can occur among the various settlements, and this is often closely related to the natural landscape in which they exist. The local topography and the precise function of the settlement play important roles in any further consideration of this topic. Tell sites in the floodplain will always be more compact than those along the desert edge, while state-planned towns and villages could be restricted in their size by the official authorities, which also resulted in relatively compact agglomerations.

The preceding examples demonstrate that calculations of population size and density based on textual and archaeological data from Egypt are on relatively slippery ground and cannot serve as reliable indicators for defining categories of settlements and contributing to the definition of *urbanism*. However, it is important to be aware of these factors, which need to be taken into account for any estimates of the size of population, households, and density within a given settlement. In contrast to Ptolemaic- and Roman-period Egypt,⁵⁹ the earlier Pharaonic period has little to offer in terms of precise data for such estimates, and it is much more helpful to move away from purely quantitative aspects to define urbanism and urban society. Therefore, a definition that is useful for towns and cities in ancient Egypt needs to be based more heavily on their role and function, their geographical location, and their overall layout.

1.2.2 Evaluation of socioeconomic aspects of inhabitants within Egyptian towns

Furthermore, it is clear that the percentage of food-producing versus non-food-producing groups within a

settlement is not a strong criterion for what qualifies as “urban society” in the ancient Egyptian civilization. The social organization of the inhabitants of any given town depends on the sociocultural and socioeconomic aspects specific to the relevant ancient civilization. For Egypt, the percentage of bureaucrats and officials within the wider spectrum of people living in a settlement depends less on the overall settlement size and more on the function and purpose of the town and its status within the whole settlement system. There is evidence that a certain percentage of the population making up urban settlements was still engaged in agricultural activities, but does that make this group less “urbanized”? There is also an example of the exact opposite scenario, where inhabitants of a settlement were comprised of a significant number of non-food-producing administrators and priests, but such a site should not be considered “urban” on this criterion alone. Social hierarchy and complexity can be studied with the help of administrative records and biographical inscriptions from the neighboring cemeteries that contain the tombs of high officials; these show that high administrators were part of many settlements that fall under the category of “urban.” Nevertheless, there is also proof that some of these people appeared within much more restricted and temporary communities that cannot easily be defined as such.⁶⁰ The primary reason for their presence at nonurban sites is their close ties to the central government and the fact that these settlements were founded by the state. It is evident that inhabitants of such sites had an urban background and should be considered part of urban society even if the actual form of the settlement does not qualify as urban.

Inhabitants engaged part time or full time in agricultural activities can be traced in almost all settlements and will be dealt with in this study through material culture excavated on site; they are often confirmed by textual sources too. These observations have created confusion as to whether Egypt should be characterized as a village society with agricultural towns or as an urban one with cities and urban centers. Chris Eyre argues in his outline of the ancient Egyptian economy that Egypt was basically a village economy. He describes rural Egypt in Pharaonic times as being characterized as “extremely compact villages – typically but not necessarily walled, occupying islands of higher lands in the floodplain.”⁶¹ Interestingly, he uses “compactness” and “enclosure wall” as criteria for defining Egypt as a village society, while most scholars would argue that these features are typical for an urban landscape. Gordon V. Childe points out almost exactly the opposite

in his assessment of urban characteristics when he states that “first cities must have been more extensive and more densely populated than any previous settlements, although considerably smaller than many villages today.”⁶² Trigger also follows this definition by emphasizing that a walled settlement is one of the markers for urbanism because it is not only a protective measure but also contributes to a shared community spirit of the people living within the enclosure walls, regardless of their social standings. Moreover, the enclosure serves as a sign of status and power in comparison with other, unwalled agglomerations in the region.⁶³ The archaeological evidence for Egyptian towns and cities reveals that town walls played an important role for the local communities and were frequently rebuilt, reinforced, and expanded according to the needs of the growing communities. They can be seen as one of the best markers for settlements of urban character, specifically for those that belong to the chosen time frame of this study.⁶⁴ One of the difficulties is to distinguish these town walls from enclosure walls serving mainly as a perimeter that frequently appear at state-founded sites with the aim of controlling and restricting the number of inhabitants.

According to Cowgill, one of the prerequisites for labeling a settlement “urban” is its distinction from the rural hinterland.⁶⁵ However, there are important differences that can be seen among political systems characterized as city-states and those that can be considered territorial states. Mesopotamian city-states have shown that these urban centers during the Early Dynastic Period contained a significant population of farmers among the non-food-producing inhabitants. The centers were distinguished by increased nucleation, probably related to economic and political factors.⁶⁶ The farmers who lived there resided within the walled cities but were actively engaged in agricultural activities in the surrounding farmland. In a territorial state such as Egypt, settlement patterns were much more dispersed, and there was a more diverse set of hierarchies noticeable among towns and cities because the state established a network of control over the agricultural land for purposes of taxation and donating land to official institutions. Even given the difference in size between the urban centers of the two political systems, there was probably a much larger population involved in sustaining a dispersed network of urban settlements in territorial states than was true in the city-state system.⁶⁷ Therefore, the percentage of people engaged full time in agricultural activities in the former system was probably lower than that of inhabitants

carrying out specialized activities, which ranged from administrative and cultic to manufacturing. This also demonstrates that for each urban system, the urban-rural dichotomy could have developed to quite a different degree depending on political, environmental, and socio-economic factors.

From a purely archaeological perspective, the rural hinterland that surrounded the urban settlements is difficult to identify in Egypt because, despite our knowledge of a rural landscape dotted with agricultural estates and villages, most evidence comes from textual sources. This is especially true for the Old Kingdom, when elaborate lists decorated the walls of mortuary temple complexes and catalogued hundreds of funerary estates founded and refounded by the rulers to assure an income for the personnel involved in the upkeep of their funerary cults.⁶⁸ This resulted in small, specialized settlements with primarily non-food-producing communities settling at these mortuary temples and forming so-called pyramid-towns, which were inhabited by part of Egypt's urban society during the third millennium BCE.

Also confusing is the use of the term “new towns” (*nwt m3wt*) during the Old Kingdom, which some scholars have interpreted as an effort of “internal colonization” in order to exploit marginal but agriculturally potent regions of Egypt.⁶⁹ The archaeological evidence does not show much in terms of newly founded settlements by the state in the Old Kingdom, which could be a consequence of such sites being lost to us because they are deeply covered under thick alluvial or aeolian deposits but could also reflect an over- or misinterpretation by modern scholars.⁷⁰ It has to be questioned whether any of these “new towns” that were created under a royal umbrella were really new or were simply the refoundation of existing hamlets and villages assigned to the control of a state institution. The latter scenario seems much more likely to have been the case.

Paradoxically, in later Pharaonic history there is much archaeological but no textual evidence for the creation of settlements as part of a wider initiative by the state to exploit the marginal but fertile zones of the country. During the Middle Kingdom, orthogonally laid-out settlements containing houses with repetitive layouts appear in different regions.⁷¹ All of these sites discovered so far were, in fact, new ones placed on previously unsettled ground. This has been verified archaeologically, and while the settlements vary in size and layout as well as in purpose, they substantiate the active role of the central government in town planning. The government created an infrastructure to install smaller or larger communities

in areas deemed worth exploiting agriculturally or having economic potential, such as access to important trade routes in the vicinity, which made more permanent installations desirable. The creation of these communities can be regarded as a measure by the state to take control of the wider “hinterland.” Examples of such settlements can be found in the eastern Delta at Tell el-Dab'a, where the earliest evidence for settlement appears to demonstrate a “colonizing” effort, as well as in the Fayum region and in Lower Nubia, where a chain of fortresses was erected during the Twelfth Dynasty. However, these new foundations appear in different layouts, sizes, and complexity and are linked to environmental and political factors as well as to their anticipated function.

The only settlement for which the relation to the hinterland is to some extent known is the short-lived New Kingdom capital at Amarna. Thanks to the boundary stelae implemented by King Akhenaten, the city limits are known quite precisely. They included a large amount of agricultural land, presumably containing hamlets and villages, which supported the inhabitants of Amarna and provided some self-sufficiency in terms of food supply.⁷² If Amarna can be considered representative,⁷³ then an urban center not only was made up of the various official buildings, domestic quarters, and associated infrastructure but also by a certain amount of agricultural land being controlled and assigned for the subsistence of its inhabitants.

Communities of agriculturalists and pastoralists most likely constituted the majority of village inhabitants but have left little evidence to assess how they differed from the “urban” sector of society. Leads that can be followed concern domestic architecture, self-sufficiency, and diet. Insights into village organization and subsistence have been obtained from the two workers' villages of the New Kingdom – at Amarna and Deir el-Medineh. These were highly trained and specialized communities of craftsmen, which, even though they appear to have operated on a village level, can hardly be equated with the average village in the Nile Valley and Delta. Most of their food supply came from the Egyptian state, a fact that made them less than self-sufficient. Indeed, they were highly dependent on the support of the central government – but not exclusively, as efforts in pig raising at the workmen's village at Amarna demonstrate.⁷⁴

Faunal analysis of the Old Kingdom settlement site of Heit el-Ghurab at Giza has identified considerable differences in diet between different areas of the settlement. These areas have been divided into three parts – Eastern Town, Western Town, and the Gallery Complex – each

of which had a different layout and character and was inhabited by different kinds of people.⁷⁵ The community of the Eastern Town consumed a much higher percentage of pig than elsewhere in the settlement.⁷⁶ Pigs have been considered a relatively cheap source of protein because they can be raised relatively easily without depending on large pastures.⁷⁷ This part of the settlement was also connected to the nearby Gallery Complex and the Western Town, which housed an administrative elite as well as the workers for the royal building sites. The inhabitants who settled in the Eastern Town probably participated in the food production activities that were conducted on an industrial scale in order to sustain a large population of workers being housed temporarily in the galleries. This would have made their living in a closely connected neighborhood profitable. As mentioned previously, evidence for pig keeping was also noted at the workmen's village at Amarna, where it has been interpreted as an initiative by the inhabitants to supplement their diet.

1.3 CATEGORIES OF ANCIENT EGYPTIAN SETTLEMENTS

Archaeological evidence such as that discussed in [Section 1.2](#), in addition to size and other considerations, can be helpful when trying to fit a settlement into a more precise category, although the supporting data is not always available in publications. Issues of categorization can only be solved when considering the full range of known settlement sites instead of limiting the choice to the most frequently cited ones, such as Lahun, Amarna, and Deir el-Medineh – chosen for their easy accessibility in terms of information. To reach a better understanding of the ancient Egyptian settlement system in general, it is necessary to include an in-depth analysis of the data. It then becomes obvious that there existed a much more complex range of sites that falls into different categories, according to function and location. The general terminology of “village,” “town,” and “city” is not precise enough to catch certain nuances noticeable in the archaeological record. While it is useful to identify a hierarchy among settlements, these hierarchies might not always be easily recognizable in the documents, and inquiries along these lines are often hindered by incomplete data. As stated earlier, quantitative criteria are not necessarily useful for establishing the settlement system and its hierarchies.

Much of the difficulty in fitting the evidence into concrete categories of settlements is related to the fact that

ancient Egyptians were rather vague in their own terminology regarding settlements. They did not have our modern categories of “village,” “town,” and “city” or specific terms for “urban” and “rural.” While it is beyond the scope of this study to reinvestigate ancient Egyptian terminology, it needs to be pointed out that the most common terms in the Egyptian language that designate settlements appear in a wide variety of contexts and do not follow our modern concepts of classifications. For example, *núwt*, usually translated as “town,” was used to designate a wide range of settlements, from farming villages and estates to major cities and national capitals, such as Thebes.⁷⁸ This term is later increasingly replaced by *dmy* (“town”),⁷⁹ which can appear in geographical lists containing terms denoting “field” and “bank” but also the well-familiar term *núwt*.⁸⁰ It is difficult to grasp the actual difference and nuance between what was designated as *núwt* and which kind of settlement was termed *dmy*. Interestingly, the latter term seems to denote a place with a quay/harbor.⁸¹ This suggests that some of the numerous terms used for various kinds of settlements are classified according to other criteria, such as the location within the floodplain and whether they possessed certain installations such as a harbor. Other defining markers that were significant for the ancient Egyptians seem to refer to whether or not a settlement had a fortified enclosure wall; if it did, it would then fall under the category of fortified town or fortress.⁸² There is also a term for “quarter” (*ḥwy.t*) that was probably used for districts within a town/city and maybe indicated administrative distinctions.⁸³ However, a detailed study of the precise meaning of such terms using textual and archaeological data is still lacking.

The Wilbour Papyrus, a document of the late New Kingdom (ca. 1150 BCE), contains an extensive list of measurements and categories of agricultural land but also names different localities, which have been translated as “mound,” “house,” “hamlet,” “villa,” and “tower.”⁸⁴ This text indicates the existence of different geographical zones of settlement that do not show an even spread of settlement types. There are clusters of “villas,” which were probably residences of officials, “towers” near larger towns, and areas where “houses” appear more numerous.⁸⁵ The Wilbour Papyrus is one of the rare documents that allows a glimpse of the hierarchy among different types of settlements that existed in the floodplain, even if these cannot be identified with much certainty on the ground. It does however indicate the existence of a complex system of classification in relation to various categories of settlements at least by the New Kingdom period.

An interesting case shedding some additional light on the particular way the ancient Egyptians used such terminology comes from the Ramesside records at the temple of Medinet Habu at the Theban West Bank in connection with the Libyans.⁸⁶ In several passages, the Egyptians mention Libyan settlements using the term *dml.w* as well as *niw.wt*. However, there is no archaeological evidence that the Libyans had larger settlements of a kind that would qualify as true towns or cities.⁸⁷ These two terms seem to designate “settlement” in its broadest sense, without any qualification as to size and layout or any notion about it being permanent. It is evident that the Egyptians employed a terminology that was adapted to their own cultural setting and fit their own perspective on settlements, which was then transposed onto the Libyan tribes, who seem to have had installations of nomadic character.⁸⁸

Again, as discussed, it is clear that the ancient Egyptians themselves did not have a particular term for “city” or “capital” that would fit our categories of urban settlement types. This makes one wonder whether our modern categorizations are at all appropriate when dealing with the ancient evidence, but at least such categories provide a familiar framework that can then be further refined according to the characteristics of ancient Egyptian culture and society.

The following list of the various categories of settlements encountered for Pharaonic Egypt is defined in relation to their role and function within the broader settlement system and based mainly on the available archaeological evidence.⁸⁹ The aim of this typology is to offer a framework for the analysis of the urban fabric and should by no means be regarded as the only approach through which settlements in Egypt should be viewed. As will be demonstrated in depth throughout the various chapters of this volume, these categories cannot adequately embrace all facets of the urban society in ancient Egypt. Therefore, different approaches looking at the evidence from a variety of angles – taking into account, for example, the layout of residential areas and even individual houses – remain important to consider here too. What does the organization of a city down to its smallest unit, the house, tell us about the social structure of the inhabitants?

The typological summary that follows is useful to keep in mind when looking at the large amount of archaeological data; however, as previously mentioned, it will not be the only method used here for developing a model for ancient Egyptian urbanism.

A deliberate choice has been made to start with those categories that are the best-known kinds of settlements

based on the current textual and archaeological record, those that belong to the category of cities and provincial capitals. This top-down approach is mainly conditioned by the availability of archaeological data and has the aim of offering a first definition of what constitutes “urban” in ancient Egypt, which is helpful for distinguishing non-urban sites. It sets the parameters for this study, but the author is also well aware of some of the persisting problems and certain overlaps that occur, especially at those sites that were founded by the state.

1.3.1 National capitals

Probably the most complex urban sites were the national capitals, which have a number of distinct characteristics. Territorial states such as Egypt saw important shifts in capitals during different periods of history. These changes were dependent not only on an advantageous location in terms of strategic or economic considerations but also on more “individual” choices made during periods of transition between different ruling families forming distinct dynasties. National capitals held a permanent seat for the central government – that is, the royal court closely linked to major economic and religious institutions such as temples dedicated to nationally worshipped gods and goddesses. It can hardly be questioned that capitals such as Memphis, Thebes, Amarna, Pi-Ramesses, Tanis, and Sais functioned as urban centers, regardless of their respective sizes, and according to the complex roles and functions they played on a nationwide level.⁹⁰ They would have ranked as the key cities that had a concentration of the highest administrative and cultic institutions and were at the heart of cultural developments, with dominant artistic styles and royal workshops and including industrial quarters and military installations. When based on purely archaeological grounds, a lot of information comes from the New Kingdom and later, but certain elements have also been attested archaeologically and from textual sources for the earlier periods even if there is no information about the full layout and organization from any of the earlier capitals. For the majority of these sites, only incomplete records are available. This makes any assessment of the precise size, layout, and organization impossible even if their location is known. Temple buildings are often the only elements that have been recorded, while the mud-brick palaces are rarely present, and the location of other settlement quarters is unknown. An exception to this is the city of Amarna, which is the only ancient Egyptian capital of the Pharaonic period that has been explored to a full

extent. It remains debatable how much Amarna was a “typical” ancient Egyptian city, because it not only was a very short-lived site but also an artificially founded place during a period of major changes affecting the sphere of politics, religion, and cultural traditions. Even though the current evidence is unevenly spread – which is the case especially for the pre–New Kingdom periods – it is possible to establish some of the basic parameters of what constitutes a national capital in Egypt.

Considering the time frame of this study, three sites are known as having functioned as national capitals and should be considered as the primary urban centers: Memphis, Thebes, and Itj-tawy, the Twelfth Dynasty capital probably situated in the vicinity of the modern village of el-Lisht in the Fayum region (see Figure 5.1). Although data for pre–New Kingdom Memphis is limited,⁹¹ there is documentation that identifies a major city in the area of the Karnak Temple at Thebes at least from the Middle Kingdom onward. Excavations underneath and near the large temple precincts have revealed settlement remains spread over a wide area. These are characterized by the presence of smaller domestic structures, production areas, and palatial buildings made of mud brick and dating to the Middle Kingdom and Second Intermediate Period.⁹² A small portion of a thick wall was also uncovered that might have been a town wall. From textual sources it is known that the Twelfth Dynasty rulers moved the royal residence from Thebes to Itj-Tawy, possibly at el-Lisht near the Fayum entrance during the reign of Amenemhat I. It has been attempted through survey work to pinpoint its likely location, but excavations are hindered by the fact that all the remains are covered by several meters of alluvium and modern settlement.⁹³ There is currently no data to provide any precise information about the layout and characteristics of this site except for the royal cemetery nearby containing two pyramid complexes of the early Twelfth Dynasty – those of Amenemhat I and Senwosret I.⁹⁴

For the Old Kingdom, the hypothesis has been brought forward that there was no real urban center, or capital city at Memphis, but instead that there had been a “capital zone” that stretched for more than 30 km along the western desert edge and fluctuated greatly in its location and growth depending on the location of the royal cemetery, which shifted during the different dynasties.⁹⁵ This is an interesting possibility based on the fact that we have almost no evidence for the Old Kingdom occupation at Memphis, and settlement remains are much more widespread along

the desert edge from Giza to Dahshur, although there is little indication of them being truly “urban” in character. It is possible that the truth lies somewhere in between these two hypotheses, namely that Memphis was an urban center and played the role of the national capital. It would have incorporated the royal court with the central government and contained one of the most important economic and religious institutions – the temple of Ptah – and was certainly enclosed by a major wall, giving rise to the name “White Walls” for Memphis during the third millennium BCE.⁹⁶ At the same time, a large number of settlements were concentrated below the desert escarpments, close to the royal cemeteries, following the regional shifts between different reigning dynasties.⁹⁷ Such a scenario would be a good solution in view of the production, supply, and administrative facilities that were probably located in these zones where the mortuary temples were located.⁹⁸ In some cases there might have been further royal palatial buildings in the vicinity, but no concrete evidence for those has been found so far, and the textual references are ambiguous.

In summary, a **national capital** can be characterized by the following features:

1. The permanent seat of the **central government** – i.e., a palatial complex of the reigning king and his court that included residential quarters but also administrative and service and storage areas.⁹⁹
2. **One or more temples of national importance**, which also played an important role within the ancient economic system – e.g., the temple of Ptah at Memphis.¹⁰⁰
3. **An enclosure wall** delineating the extent of the city, which might be inferred from textual sources for ancient Memphis.¹⁰¹ Remains of a large 6 m wide enclosure wall that might have been part of the ancient town wall around the city of Thebes have been discovered at the excavations east of the Sacred Lake at Karnak.¹⁰²
4. **A royal cemetery in the vicinity**: At all the national capitals that housed the main royal palace and administrative quarters, there was also a royal necropolis present, usually located along the western desert zone close to the floodplain.
5. **Manufacturing and production areas**: for example, the royal workshops were usually situated in the capital.¹⁰³

1.3.2 Provincial capitals

On the next level of the hierarchy, below the national capitals and seats of royal authority, there are a number of larger towns that show urban characteristics in terms of complexity and layout and can be termed provincial capitals. These sites were dispersed in almost regular intervals within the Nile Valley and Delta and corresponded to the largest towns within the system of nomes or provinces that divided the entire territory into administrative districts and whose borders remained relatively stable during most of the Pharaonic period.¹⁰⁴ This situation favored the long-term occupation of these nome capitals, often spanning several millennia, and led to the formation of artificial mounds created by superimposed layers of different phases of occupation and the constant building, destruction, and rebuilding of the mud-brick houses. The majority of these towns were situated close to the Nile River or one of the main Nile arteries in the Delta, which serves to further emphasize their role as important nodes along major routes of transit. Most of them had access to trade routes or quarries leading into the Eastern and Western Deserts. These towns played a critical role on an economic level and were the essence of local power, and during most periods they had close ties to the central government. To some extent the various elements recognized as the principal characteristics of these nome capitals copy those of the national capitals, but on a different scale.

Many of these provincial capitals came into being during the Early Dynastic Period and several among them formed the main town or capital of the so-called proto-kingdoms before the unification of the Egypt by the First Dynasty.¹⁰⁵ The best-known examples of these early urban centers in Upper Egypt include Hierakonpolis, Naqada, and Thinis, while in the Delta there were larger towns at Buto, Tell el-Farkha, and Tell el-Iswid (Figure 4.1).

From the Third Dynasty onward, it is possible to trace nomarchs – local governors in charge of an entire nome (or province), sometimes several at once – as the highest administrators of the provinces.¹⁰⁶ These important provincial administrators were in charge of the whole nome, including the different settlements within it. Their residences seem to have been located at the respective provincial capitals, which were the *de facto* seats of provincial power. Archaeological evidence confirms that these towns could vary considerably in size and complexity. One of the largest provincial centers during

the Predynastic and Early Dynastic Periods was Hierakonpolis in Upper Egypt. In comparison, Elephantine existed on a rather modest scale during that time.¹⁰⁷ Both places had a moderate level of social complexity, with a certain number of officials in charge of the local administration but also some higher administrators who had ties to the capital.¹⁰⁸ The evidence from Hierakonpolis suggests that there had been close links to the emerging kingship, because several Early Dynastic rulers were depicted and named on cult objects found in the Main Deposit at the local temple. During the early Old Kingdom (Dynasties 3 to 4), the central authorities appear to have taken advantage of the existing settlement system within the provinces. This can be seen by the establishment of royal estates and domains in order to have some control of the agricultural land within the provinces. The larger nome capitals might have acted as administrative centers where the revenue from the countryside was collected and sent to the capital.¹⁰⁹ Their connection to the central government can be deduced from the large corpus of clay sealings discovered during the excavations of the Early Dynastic and early Old Kingdom occupation at Elephantine. These confirm local and national levels of the administrative system.¹¹⁰

During the latter part of the Old Kingdom, the highest officials (nomarchs) in charge of provincial administration increasingly resided permanently in these nome capitals and often represented several other offices, especially as “overseer of the temple” and “overseer of the priests.”¹¹¹ Some of these highest provincial officials were educated at the royal court and then sent to provinces to take up their posts.¹¹² These factors point toward a strong social hierarchy and differentiation among the occupants of these provincial towns.¹¹³ At the end of the Old Kingdom, powerful elite families established themselves, especially in the south of Egypt, and took charge of their assigned region. This can be attested by the trend in which the position of nomarch became hereditary – one of the factors often cited as having played a role in the breakdown of the central state.

There is a noticeable rise in the power of these provincial capitals at the end of the Old Kingdom, which resulted in the presence of rivaling families during the First Intermediate Period, a time marked by political fragmentation. Nonetheless, there is evidence that this was a prosperous and culturally dynamic time for the development of the towns, which indicates that they were little affected by such profound political changes.

However, those changes had a significant impact on the development of sites in the Memphis region at the end of the third millennium BCE, leading to a marked decline in settlement and building activities. There is no evidence for a similar phenomenon affecting the provincial capitals, which, quite to the contrary, seem to have flourished, especially in the south.¹¹⁴ While textual records indicate that there were several conflicts between local ruling families, indications are that the provincial capitals were relatively firmly established local power centers that promoted stability within their provincial settings. This trend is also noticeable at the end of the Middle Kingdom when the official administrative system falls apart and the royal residence of Itj-tawy is abandoned some time during the second half of the Thirteenth Dynasty. There is evidence that the kings increasingly sought alliances with the elite families from these provincial capitals in order to strengthen their own power bases, especially after the central government had more or less disintegrated by the early Second Intermediate Period.¹¹⁵

Several distinct features can be recognized that characterize the provincial capitals. Similar to the national capitals, in the center of each town stood the main temple dedicated to the local town god (*ntr nwt*). From the Middle Kingdom onward, the cults for these deities had successfully been embedded into the wider economic system of the country.¹¹⁶ The temples evolved from a small-scale institution of only provincial importance that was entirely administered by the local community during the Old Kingdom to larger stone temples with economic functions by the Twelfth Dynasty. Increased royal interest and donations are noticeable. Often, additional sanctuaries in the form of chapels and small shrines can be found at these towns. For most of the Old Kingdom, the temples functioned as institutions that were maintained on a local level and that had not yet been integrated into the nationwide economic system. This only happens from the late First Intermediate Period/early Middle Kingdom onward.¹¹⁷

Another principal feature of the provincial capitals is their town wall. At most locations, different phases of enclosure walls can be traced through various periods. They often reached considerable thickness and certainly constituted a protective fortification and a way of controlling access from and to the town. It is also likely that the town enclosure wall had a symbolic significance and acted as a “status symbol” marking an urban center and differentiating it from its nonurban hinterland.¹¹⁸ At tell sites, archaeological remains often show the presence of a

sequence of enclosure walls that were in use during different periods of time, indicating that town walls were not restricted to certain historical periods but were a major element of towns throughout Pharaonic history.¹¹⁹

These massive mud-brick walls also had an important effect on the town’s general layout and organization. There is evidence that older enclosures that had long fallen out of use as town walls still shaped the way new buildings and walls were erected long after their original function had ceased.¹²⁰ Other kinds of enclosure walls – for example, surrounding early temples or palaces – are not very well attested in the archaeological record.¹²¹

Another defining element of the towns is the presence of a governor’s palace/residence, which functioned not only as the residence of the local mayor in charge of the town but also as the administrative center. Two of the better-known buildings of this type have been excavated at Elephantine and Ayn Asil/Balat in the Dakhla Oasis and provide an insight into the various components of such structures. At Ayn Asil, the palatial complex consists of residential quarters that were also used for administrative purposes, as can be deduced from the objects found inside them.¹²² Other components are large storage and production facilities, including a pottery and stone workshop.¹²³ For both governors’ residences, cult places for the *ka*-cult of the governors have been discovered. These cult areas had been granted as a special favor by the king, signifying the close link between the central government and provincial leaders.¹²⁴ They were also an integral part of the larger building complex that contained the residence.

Production and storage facilities are important components of the towns. As to manufacturing and larger-scale production areas – which have been attested for food and metalworking or faience – these usually were located at the outskirts of a settlement. For example, at the First Intermediate Period settlement at Abydos, remnants of a large faience workshop dating to the Old Kingdom were noted. The workshop had been situated along the southwestern limits of the town but was later built over by an expanding settlement.¹²⁵ Similarly, bread-making facilities of a scale larger than required for supplying a single household have sometimes been found close to areas at a settlement’s margins. This has already been well attested at the Predynastic settlement at Hierakonpolis, where large bread and beer production areas have been excavated in several distinct zones.¹²⁶

Storage facilities, such as magazines or silo courts, were in some cases located close to the town wall. New discoveries from Tell Edfu reveal that there were storage facilities built against the interior of the face of the town enclosure wall.¹²⁷ For the Second Intermediate Period, a major silo courtyard in the center of the settlement has been discovered that held the grain reserve of the town during this time.¹²⁸ The remarkably large size of the silos provides good evidence for the presence of a major grain storage area presumably administered by the highest administrators in the town.

Another element typical for these regional capitals is the presence of a nearby cemetery. The exact location of a necropolis depends much on the natural geography around each town. While the highest provincial elite often preferred to build elaborate rock-cut tombs in the nearest possible cliff formation, these could lie at some distance from the actual settlement. At Elephantine, the preferred burial place for the highest elite was located at Qubbet el-Hawa, about 1.5 km north of the town, which was in use from the second half of the Old Kingdom onward. At Edfu, suitable rock formations lay even farther away – to the west at Hagar Edfu. Rock-cut tombs appear here only during the Second Intermediate Period, whereas during the Old and Middle Kingdoms, most elite members were buried close to the town in a cemetery made up of mud-brick mastabas decorated with stone elements.¹²⁹

In addition, there is considerable evidence that members of the lower levels of society were often buried quite close to the actual settlement, but these tombs are less conspicuous and have received little attention in terms of archaeological fieldwork. The remains of the provincial capital of the sixteenth Upper Egyptian nome, once called Hebenu, which today lies next to the village of Zawiet Sultan (Zawiet el-Meitin) near Minya in Middle Egypt (Figure 5.1), provide a typical example of a necropolis along the margins of a town. Although a series of late Old Kingdom rock-cut tombs were found in the higher-lying cliff face, a large number of simple shaft tombs and mastabas were located below, along the more gentle desert slope directly bordering the ancient settlement.¹³⁰

At Elephantine, the western island has been used for mastaba tombs from the Fifth Dynasty onward and remained in use even during the Middle Kingdom when cemetery and town grew close together.¹³¹ A comparable situation has been noted at Dendera, the capital of the sixth Upper Egyptian nome. No cliffs

were in the proximity of the settlement, but the necropolis of the ancient town stretches along its western side over a fairly large area marked by flat desert. A considerable number of elaborate mastaba tombs of the local elite, dating back to the Early Dynastic Period, have been excavated there.¹³²

The decorated tombs of the highest elite, which could take different forms according to the local geography (from rock-cut tombs to mud-brick or stone mastabas), give insight into the rather complex hierarchy of the local elite and their ties to the crown. From the Fifth Dynasty onward, important provincial administrators chose to be buried in proximity to the towns in which they lived, leaving elaborate inscriptions in these tombs that provide information about their respective social ranks within the settlements and also emphasize their ties to the crown.¹³³ The evidence from the inscriptions sometimes indicates their involvement in agricultural activities or their ownership of land in the surrounding region. One example comes from the tomb of Harkhuf, an expedition leader from Elephantine and certainly a member of the highest elite, whose records in his tomb at Qubbet el-Hawa indicate that he built a house with garden and pool.¹³⁴ If this can be considered true, it is unlikely that such a building would have been located in the town of Elephantine, so it might be a reference to an estate that Harkhuf owned. This could be one of the rare glimpses of the elite having additional property in the countryside while their main seat was in one of the provincial capitals. Currently there is no proof that Harkhuf actually resided at Elephantine, but because he was buried at the nearby cemetery at Qubbet el-Hawa and Elephantine is the only large town in this region south of Kôm Ombo, it is likely that at least his administrative seat would have been located there.

Little information for the time frame chosen for this study is available for the Nile Delta, even from important tell sites that hold the archaeological remains of nome capitals such as Buto, Kôm el-Hisn, Mendes, and Bubastis. A rare exception is the site of Tell el-Dab'a, which has been excavated in much detail, but its exact status as a nome capital cannot be substantiated. However, during the late Middle Kingdom and Second Intermediate Period, a regional urban center developed here and then functioned as the capital of the Hyksos rulers.¹³⁵

The majority of these Delta towns provide little more than glimpses into their layout and different components, frequently with a focus on a single building complex such

as the governor's palatial complex at Bubastis dating to the Middle Kingdom and adjacent cemetery or a smaller group of houses such as those found at Kôm el-Hisn, which date to the Old Kingdom.¹³⁶ At Buto, another example, an impressive Early Dynastic building complex has been excavated.¹³⁷ In all of these cases, there is not enough data to precisely assess the size and layout or more than a couple of the major identifying elements of these regional centers in the Delta region.

Key elements that define a **provincial capital** are:

1. A main **temple** dedicated to the local town god, which functioned as the most important cult place but from the Middle Kingdom onward also played an economic role on a national level;
2. A **town wall**, which can show a remarkable thickness and several phases of reinforcement and rebuilding, marking the limits of the town, providing protection and a means of controlling access but also possibly functioning as a status symbol that identifies it as an urban center within its region with close ties to the central government;
3. **Governor's residence** or **palace** as the seat of the local mayor or nomarch, who was the highest official of the town;
4. **Production and storage facilities** of official character that were often located along the margins;
5. **Local cemeteries** near the town containing the tombs of the elite and lower levels of society; such cemeteries could lie directly adjacent to the settlement, while rock-cut tombs for the highest officials lay in some cases farther away due to the local topography.

1.3.3 State foundations with planned layout

Towns founded by the state create a particular category of settlements, which has several subgroups related to layout and function. State foundations during the third and second millennia BCE are mainly characterized by the fact that they were founded on virgin soil by the central government and are frequently laid out following an orthogonal grid system with repetitive house layouts separated by streets that follow the same orthogonal organization. This type of town planning can be traced back to as early as the Old Kingdom.

The earliest-known state-planned settlement with orthogonal layout has been discovered close to the mortuary complex of Queen Khentkawes at Giza and was established for the community of administrators and priests that took care of the queen's mortuary cult.¹³⁸ This town was adjacent to her mortuary temple and tomb structure.¹³⁹ Additional settlement installations situated in the vicinity of royal mortuary complexes of the Old Kingdom are known from textual and archaeological sources, but though all of them had close administrative links to the central government and inhabitants received an income from state institutions, an orthogonal plan and layout has only been attested for the Khentkawes settlement. There is considerable evidence that except for the latter example, the construction of buildings at these sites was more or less left to the individual occupants within the perimeters of the mortuary temple complex. They often cannot be considered true settlements per se and have frequently been interpreted as of a "squatter" type, or informal ad hoc housing. However, this interpretation is to some extent misleading and not quite correct given the archaeological evidence. According to these observations, such installations have been assigned to the category of "special-purpose settlements" (details follow).

It is during the Middle Kingdom when these orthogonally laid-out settlements become a more popular phenomenon. The largest ones are closely linked to the mortuary complexes of two Twelfth Dynasty rulers. One has been excavated at southern Abydos at the town of Wah-Sut, and the other is the well-known town of Lahun at the entrance to the Fayum. The former is slightly smaller and covers between 5.4 ha and 7.2 ha; Lahun extends for almost 10 ha.¹⁴⁰ In both cases, their role is related to the upkeep of the royal funeral cult, and they can be considered pyramid towns of the Middle Kingdom. So far, Lahun is the only case of a state foundation that can be identified as a kind of idealized, preplanned version of a fully functioning urban center.¹⁴¹ It contains various elements that closely mirror the setup of key installations already noted for provincial capitals. Lahun seems to have had a local temple (other than the royal mortuary temple) and a mayor's residence. It was enclosed by a mud-brick enclosure wall, and even though this was not of a fortified character, it served to mark the boundaries of the settlement and provided a way to control access to and from it.¹⁴² Furthermore, the architecture and large amounts of discarded sealings indicate the presence of

administrative buildings at its center. The whole town contained elite residences in the form of large mansions, each of which had been equipped with large granary units that at the outset of the occupation were probably used to pay the other inhabitants of the town, who lived in several rows of much smaller houses. Papyrus documents, found in considerable quantities, reveal that the administrative hierarchy at Lahun was no different from that of any of the provincial capitals, with a mayor and overseer of the temple in charge of the whole town.¹⁴³ After the initial foundation, an extension of the settlement area was added on its western side, which can be specifically linked to the upkeep of the royal mortuary cult at the nearby Valley temple. As will be covered in [Chapter 8](#), there is some evidence suggesting that, from the outset, Lahun might not have been intended as a pyramid town and instead had a different purpose. Its initial foundation could have been linked to a phase of major development initiated by the rulers of the Twelfth Dynasty in the Fayum. Ties between Lahun and the newly founded capital at el-Lisht located nearby should also be considered.

Although the size and orthogonal layout of Lahun resembles the slightly later town of Wah-Sut at Abydos, it does not necessarily mean that both settlements were founded for the same purpose. Wah-Sut is also an impressive site, but less than 50 percent has been excavated and some elements are absent here that are present at Lahun. The former is lacking any evidence or reference to a temple other than the mortuary temple for Senwosret III, and so far no traces of any kind of enclosure wall have been found.¹⁴⁴ The mayor's residence has been excavated in much detail; it is currently the largest building complex found at the site and combines administrative and residential areas.¹⁴⁵ Also missing are the rows of smaller houses, but the reason for this may be that part of the site has been destroyed by modern agriculture and settlement. Wah-Sut had been established as a pyramid town linked to the mortuary temple complex of Senwosret III at Abydos and had, without doubt, been conceived for this specific purpose right from its initial foundation. Currently, Lahun and Wah-Sut are the largest-known preplanned towns that date to the Middle Kingdom, and their layout as well as the inhabitants can be considered part of the urban phenomenon in ancient Egypt.

There is also supportive documentation from the Middle Kingdom for the existence of smaller state

foundations that served a variety of purposes; they can be characterized by orthogonal layouts too. These settlements are much less complex, and the term "urban" does not really apply to them. As mentioned previously, the rulers of the Twelfth Dynasty conducted a profound reorganization of the whole country and took control of the provincial administration. Some part of their strategy can be seen archaeologically by the foundation of settlements in marginal areas that are now recognized as having had a good deal of economic potential, such as the Fayum, the eastern Delta, and Lower Nubia. These smaller settlement foundations were more uniform in their layouts, yet the architectural details differ from site to site. It is noticeable that there is no hierarchy among the size and layout of the individual houses in any of these communities. Three of them have been excavated up to now – one at Qasr el-Sagha in the northern Fayum and two at Tell el-Dab'a, where they constitute the earliest settlements in the area. All had a mud-brick wall marking the perimeters and orthogonally laid-out streets or alleys. There is no evidence for any temple/chapel at its center or a larger residence for the official in charge of the settlement.¹⁴⁶ The intent was for smaller communities to settle in previously unsettled areas. From the finds it can be deduced that the inhabitants had been engaged in agricultural activities, but little additional information as to their occupations has been found. At Qasr el-Sagha, the function of the planned settlement ("Western Settlement") is difficult to determine. Remains of an unfinished Middle Kingdom stone temple were found in proximity but were not directly attached to the settlement. To the east, evidence for a production area, termed the "Eastern Settlement," has been partially excavated.¹⁴⁷ A small cemetery dating to the Middle Kingdom has been found nearby. Thus, the combination of these various installations indicate that there might have been long-term plans for permanent settlement in this area, but the evidence is too fragmentary to be more precise in interpreting its role in this region. Any link to the exploitation of the basalt quarries at Widan el-Faras can be excluded.¹⁴⁸

Also important to note are the fortresses that were established in Lower Nubia, which are unusual because of their impressive mud-brick fortifications. Their interiors also show a grid layout and resemble small settlements that were laid out according to a specific orthogonal pattern containing various elements present at all of the known fortresses. These structures include the residence

of the commander in charge of the fortress administration, a granary block and magazines for storage that often made up a considerable part of the fortress interior, and residential units such as barracks or small houses.¹⁴⁹ The important economic role of these fortresses is beyond doubt, and they also provided significant strongholds in a region strictly controlled by the Egyptians during the Middle Kingdom.¹⁵⁰ The fortresses are another element within the larger town-planning effort of the Twelfth Dynasty that especially served the purpose of controlling and exploiting regions of economic importance.

Probably the closest parallels to these state foundations dating to a period later than the Middle Kingdom are the two workers' settlements of the New Kingdom at Deir el-Medineh and at Tell el-Amarna, although only the latter had been organized according to a strict grid layout.¹⁵¹

From what is currently known, it appears that orthogonal town planning by the state was at its height during the Middle Kingdom. The common denominator of these settlements is that they were founded by the state for a specific purpose, and there were idealized versions of various kinds of settlements adapted in each case to the local environment and the specific function they served. Little is known about adjacent cemeteries, but this could be because the areas surrounding them have not been investigated sufficiently. Lahun and Wah-Sut, the two largest examples of state-founded sites, belong to the category of urban settlements, whereas the others are nonurban in character. It is not known how the inhabitants of any of these sites were chosen and under what criteria. The only study that has investigated the social network of such communities – for example, by investigating shared household facilities – is that of the workmen's village at Amarna, which suggests that the inhabitants might have come from an already-existing community.¹⁵² If this is a representative example, it could be that some of the smaller state-founded settlements were inhabited by similar communities.

The biggest challenge of this category is whether these two groups of state-founded settlements – which can clearly be distinguished in the archaeological record according to size, layout, and social complexity – should be classified according to the concepts of “urban” and “nonurban.” I hesitate to force them into these categories even though one could make a case by pointing out the main elements that occur within them. Some of these elements are easily recognizable, whereas

others, especially the walling of such sites, is less evident. For clarity, the two groups will be assigned urban and nonurban characteristics, but as mentioned previously, this is by no means the optimal solution for this topic.

A. State foundations with **urban** character:

1. A **temple or sanctuary** in the center of the town (other than the royal mortuary temple)
2. A **mayor's or governor's residence**
3. A **town enclosure wall** that was usually unfortified and functioned as a perimeter wall (the main purpose does not seem to have been protection against a perceived threat but rather to mark the limits of the town and to restrict the number of inhabitants to the designated settlement space)
4. An **administrative area** that can be part of the mayor's residence
5. An **orthogonal layout** of streets
6. The **repetition in house layouts** and indication of a **hierarchy** of different sizes (presence of smaller and larger houses)
7. The location along the **desert edge** next to the floodplain

B. State foundations of **nonurban** character:

1. A **mud-brick enclosure wall**, used to mark the perimeters of the settlement, which is never fortified but in the same way as for the previous category serves to mark the boundaries and restrict the number of inhabitants to the demarcated space
2. Frequently with an **orthogonally laid-out street network** but also existing without such a layout, especially during the third millennium BCE
3. Mud-brick buildings with **repetitive layouts and no visible hierarchy** (Old Kingdom examples show less of a uniform plan but also little hierarchy in terms of size and complexity)
4. Location along the **desert edge**, but they have also been found in the eastern **Nile Delta** (for example, Qasr el-Sagha versus Tell el-Dab'a)

C. Fortresses

1. A **fortified** enclosure wall of defensive character
2. **Orthogonal layout** of streets and pathways in the interior of the fortress
3. In the use of **repetitive modules** for different kinds of buildings – e.g., magazines, barracks, and residential units – the thickness of the walls seems to demarcate official buildings in comparison with the simpler barrack-style structures
4. Large granary complex and treasury
5. The residence of the fortress commander (**command building**), which was also the seat of the fortress administration
6. A **protected approach leading to the river** providing access to water in case of a siege

1.3.4 Special-purpose settlements and production sites

As mentioned previously, there are various kinds of non-urban installations that need to be considered in a separate category because they share several important characteristics but occur in very different contexts and locations. One important aspect of such sites is their close link to the state. In most cases their principal inhabitants received an income from the state and were only temporarily occupying the sites either as part of a rotation system or during the seasonal exploitation of raw materials. Their existence is related to activities and efforts supported by the central government, and there is little evidence for any direct “town planning” effort such as the installation of uniformly laid-out houses according to a grid pattern. This indicates that some logistical support was provided, but as to the installation of buildings there is no conclusive evidence for state interference in the overall layout. In most instances, the clusters of buildings were not inhabited by individual families on a permanent basis, which can be witnessed by the lack of food production and storage facilities. The temporary aspect is specifically noticeable at the more isolated mining and quarry sites but also at the houses that can be termed “priests’ accommodations” situated within the perimeter of the mortuary temples complexes in the Memphite region during the Old Kingdom. In the past, such simple mud-brick

installations have been interpreted as signs of encroaching settlement built by the personnel who were involved in the upkeep of the royal mortuary cults.¹⁵³

What is typical for all these settlements is the obvious investment and a certain degree of control by the central government – for example, in relation to the number of inhabitants. All sites, in one way or another, appeared in the vicinity of royal construction work or served as places offering accommodation during the exploitation of raw materials for which the state held the monopoly in the Old and Middle Kingdoms. These settlements were necessary for the ongoing monumental building work initiated by the king, such as the extensive royal mortuary complexes and production of the valuable stone vessels and other mortuary equipment (sarcophagi, stone for stelae, etc.) that served as important prestige objects for the elite. A strong supply network, good infrastructure, and firmly established administrative system were important prerogatives of the central state that also explain why most of these sites were abandoned during the First and Second Intermediate Periods.

Currently, the largest-known settlement in the subject “special purpose” category lies at the site of Heit el-Ghurab at Giza, which consists of three different parts: the Gallery Complex, the Eastern Town and the Western Town.¹⁵⁴ This example is also the most difficult to fit in the category, because it consists of multiple components that do not necessarily form a very homogeneous ensemble. The primary purpose of the town at Heit el-Ghurab was the construction and administration of the Fourth Dynasty pyramid complexes, and its lifetime did not continue in any significant way after the Fourth Dynasty. The three elements of the town covered a sizeable area and were quite different, but together might be considered as having displayed some urban characteristics.¹⁵⁵ The Gallery Complex was most likely used to house a large number of temporary workers employed at the royal building sites. The nearby food production areas prove that large-scale organization of food preparation existed for a considerable number of people (termed EOG industrial yard by the excavators). The Western Town appears to have included high administrators living in sizeable houses that likely functioned as residences and were also used for administrative activities.¹⁵⁶ The Eastern Town has more of a “village”-like character in that it contained a dense agglomeration of smaller houses, which had their own storage installations and household food production areas without any evidence for administrative activities taking place there.

There is also no specific and recognizable organization in the overall layout of the Eastern Town, which does not show any evidence for town planning. It is likely that the nearby Gallery Complex attracted a sizeable number of people who were involved in supporting the main workforce stationed in the galleries. The inhabitants of the Eastern Town might have worked in the large food production areas such as the EOG industrial yard (Figures 5.11 and 5.14).

As just indicated, the character of the Heit el-Ghurab settlement is difficult to assess as a whole because its three distinct elements provide proof that a large number of inhabitants were engaged in very different activities. There are no signs of any large-scale orthogonal planning efforts at this site, especially in comparison with the Khentkawes settlement nearby. Only the Gallery Complex and the main administrative building with the central granaries (Royal Administrative Building [RAB]) were surrounded by an enclosure wall, which seems to have served to control access to this part of the settlement (Figure 5.14).¹⁵⁷ The Gallery Complex is the only area of the town that shows an orthogonal layout, and this feature is marked by several rows of uniformly built galleries separated by four streets. The complex might have been the initial foundation at Heit el-Ghurab before the “Eastern” and “Western” towns were established.

In conclusion, it is important to note that while the town at Heit el-Ghurab reached an impressive size during the Fourth Dynasty, it remains a specialized settlement because of its role and function – one closely linked to the state and its construction work. When the rulers of the Fifth Dynasty moved the royal necropolis to Abusir, Heit el-Ghurab was abandoned. This fact indicates that the initial purpose of the settlement as a support installation for the royal mortuary complexes did not lead to the evolution of a self-sustained town that had any reason to exist beyond its primary function.¹⁵⁸ It is possible to infer, then, that the inhabitants of Heit el-Ghurab were largely dependent on the central government for their subsistence, which could have become a prime motivator for abandoning the settlement as soon as the new royal necropolis at Abusir was founded. So far, it is unknown whether the inhabitants moved there or whether an entirely new community was established for a similar purpose.

Another site that also belongs to the category of special-purpose settlements, though on a smaller scale than Heit el-Ghurab, is near the Menkaure pyramid at Giza. The buildings discovered during excavations consist of several

smaller barrack-style structures that resemble the larger galleries at Heit el-Ghurab, with its numerous production facilities such as large courtyards, ovens, and kilns.¹⁵⁹ The outer enclosure wall of the pyramid complex, only partially excavated, reveals buildings leaning against it on its interior and exterior faces (Figure 5.19). This settlement was equally short-lived and was closely linked to construction work at the Giza necropolis.

Fieldwork at Al-Shaykh Said/Wadi Zabayda, south of Deir el-Bersheh, has revealed an industrial site that had been used for the manufacture of stone objects made of limestone and calcite alabaster, extracted from a nearby quarry.¹⁶⁰ In addition, evidence for large-scale food production, especially in form of ash deposits, and a great quantity of bread molds were found. These discoveries, in connection with the results of the archeobotanical and faunal analyses, strongly suggest that there had been a settlement closely linked to the extraction and transformation of raw materials, which was instigated and supported by the state.¹⁶¹

A small Middle Kingdom settlement that can be associated with the extraction of amethyst has been discovered in the Eastern desert at Wadi el-Hudi and contains two specific areas: a small fortress and a site with stone huts.¹⁶² Both the Eastern and Western Deserts are scattered with temporary installations, which were used as dwellings and encampments during short-term mining expeditions. The buildings are usually made of stone, as this was the local building material readily available. Three kinds of buildings have been recorded in association with these mining and quarry settlements: houses with rectangular walls made of dry stone or mud brick (depending on whether it was possible to make them locally); simple round huts made of dry stone, often enclosed by a protective wall; and the even-simpler, temporary constructions providing shelter from the elements, also using mainly stone as the building material.¹⁶³

Settlements of a temporary nature that functioned during the Old and Middle Kingdoms were found along the Red Sea coast at Ayn Soukhna, Wadi el-Jarf, and Mersa Gawasis – formerly harbor sites and way stations for exploiting the Sinai and used as departure points for seafaring expeditions.¹⁶⁴ There was a complicated supply and production system that could support a large number of people for the duration of a royal expedition.

All of the examples presented in this section provide evidence that such settlements were connected to the construction of larger royal monuments or the

exploitation of raw materials and were part of the overall settlement system during the second and third millennia BCE. They cannot be considered urban *per se* but without doubt were part of the general urban footprint of ancient Egyptian society. The main characteristics of **special-purpose settlements and production sites**:

1. **Unplanned layout** and **nonurban** in character but closely connected to major installations and construction projects of the state.
2. Inhabitants were to a large extent supported in the form of rations by the state and can be exempted from certain taxes or labor obligations as provided in royal decrees.
3. Such settlements have been found in a **wide variety of locations** – for example, in the vicinity of **construction sites and quarries** that can typically be found along the desert margins, in the desert, or along the Red Sea coast.
4. The presence of **production facilities** in the form of ovens, kilns, and/or proximity to a quarry site – often including large-scale food production and even pottery manufacturing to support the people involved in the extraction of raw materials as well as the numerous expedition members who were temporarily living in a rather hostile environment.
5. In some cases there is evidence for the presence of **centrally administered storage facilities**.
6. The use of locally available building materials for the houses.
7. **Short-term occupation** linked to the activities of construction work or the exploitation and processing of raw materials.

1.3.5 Rural settlements/villages

The last category of settlements is the least known from the archaeological evidence. Textual sources indicate their presence in considerable numbers within the Nile Valley and Delta and provide evidence of the existence of a rural hinterland where villages exploited agricultural territory that was linked to larger towns, especially the nome capitals and their elite. One of the most famous documents is the Wilbour Papyrus of the late New Kingdom, which holds an inventory of landholdings in Middle Egypt that names 416 settlements including

various categories of localities present in the floodplain.¹⁶⁵ For the Old Kingdom, it can be attested that there were rural villages and hamlets that formed domains with the intent of guaranteeing a constant supply of food and raw materials, especially to the royal mortuary complexes. Some recently discovered blocks from the causeway of Sahure at Abusir have shown that this ruler had founded more than 100 such domains.¹⁶⁶ So far, the challenge has been to identify these sites archaeologically because identification has been hampered by modern agriculture and settlement in the Nile Valley and Delta, making identification and protection of ancient settlements difficult. The lack of data has led to comparing conditions in rural Egypt in antiquity with those during medieval times and the seventeenth to the early nineteenth century. This includes comparing social stratification and local organization during these eras, which, although tempting, risks making analogies among disparate systems that did not have much in common except for being influenced by the same environmental and topographic conditions.¹⁶⁷ As will be discussed in [Chapter 3](#), the environmental conditions in Egypt, specifically the annual Nile flood, allowed settlement in only certain places that provided higher ground as protection from floodwaters. However, according to textual sources, this does not seem to have resulted in fewer villages being present in the area.

Interestingly, archaeological surveys have not uncovered a single village in the floodplain, yet.¹⁶⁸ Even sites such as the Old Kingdom settlement at Kôm el-Hisn in the western Delta, for which only a small area has been excavated and where small houses were found next to cattle corrals, had the official status of a nome capital and can be considered part of a much larger town.¹⁶⁹ The “Eastern Town” at the Old Kingdom settlement of Heit el-Ghurab comes closest to the category of a “village” during the third millennium BCE.¹⁷⁰ It has a large number of tightly packed houses, all of which had their own storage facilities and small food production areas. The streets and pathways are not in any way firmly established and do not follow a specific hierarchy. There also is no sign of any enclosure wall, a specific local sanctuary, or any larger central storage facility administered by the community. People seem to have been mainly self-sufficient with their own small storage installations, and evidence from the faunal remains reveals that one of their main sources of protein was from pigs; the animals were easy to raise, without the need of a lot of space for grazing or large corrals to keep them.¹⁷¹ The “Eastern Town” at

Heit el-Ghurab shows no signs of any planning, and the orientation of the mud-brick buildings differs from that of the Gallery Complex and the Western Town. The former, especially, resulted from the state-planned part of this site and likely attracted a community of people who settled in the vicinity of a vibrant settlement closely linked to the administration and work at the royal necropolis at Giza during the Fourth Dynasty. Nevertheless, it is difficult to accurately assess whether the layout and the organization of the Eastern Town were similar to those of the villages in the floodplain that were surrounded by agricultural land, although it is likely that they were. The Eastern Town was inhabited by people who made their own decisions about buildings, food supply, and storage, and they kept animals even though they were to some extent attached to other parts of a state-planned settlement.¹⁷²

As for a first definition of the characteristics of a rural settlement that would fall under the category of “village,” it is possible to draw some conclusions from those state-founded sites that do not belong to the urban category (see previous sections), such as the early Middle Kingdom settlements excavated at Tell el-Dab’a. Such characteristics were likely similar at rural villages:

1. Relatively similar types of houses with **little or no hierarchy**;
2. Evidence for involvement, primarily in agricultural activities;
3. Absence of any fortified enclosure wall;
4. **Self-sufficiency and surplus production**, which could be traded for other commodities and could be collected as taxes by the larger urban centers;
5. **Lack of formal sanctuary or temple** for the local inhabitants.

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Current and Past Studies of Egyptian Settlements

2.1 HISTORICAL OVERVIEW OF SETTLEMENT ARCHAEOLOGY IN EGYPT

Until recently, with few exceptions, urbanism and settlement systems have been largely absent from analytical examinations of ancient Egypt. Any historical overview of settlement archaeology in ancient Egypt has to start with the British scholar William Flinders Petrie (1853–1942). Petrie is the first Egyptian archaeologist who moved beyond the description of monuments and art to consider questions of settlement and daily life as key elements in a holistic picture of ancient Egyptian society. His work on the Middle Kingdom settlement at Lahun, close to the entrance of the Fayum, is still the fundamental study of a state-founded and planned settlement and contains remarkable details in its archaeological description. He worked at many sites in the Nile Valley and the Delta and rapidly published his findings in archaeological reports. His methodology was primarily descriptive in nature, which makes his work valuable, even a hundred years after the original publication. Although he produced many site plans, these did not contain deep analyses of archaeological formation processes and information on stratigraphy that would be useful for reference today. In addition, his plans often contain multiple phases of occupation, which makes evaluating different occupation phases difficult, if not impossible. Today the Petrie Museum of Archaeology at University College London houses the majority of his objects, which were excavated or bought and used by him for teaching.¹ It is evident that Petrie's research goals went beyond valuable objects of art and were geared toward understanding the daily life of the people. He was an archaeologist ahead of his time in how he conducted excavations; developed methods for analyzing finds, such as the famous sequence chart for

dating Predynastic pottery; and published his finds in much detail. He can be considered the “father” of Egyptian archaeology, including settlement archaeology. His interest in the history of sites is emphasized in his narrative about his ten years of fieldwork in Egypt.² Petrie also expresses much enthusiasm when realizing the potential of exploring an entire town of the Twelfth Dynasty at Lahun, which he calls the “town of the pyramid builders”:

The great prize of Illahun was unknown and unsuspected by any one. On the desert adjoining the north side of the temple, I saw evident traces of a town, brick walls, houses and pottery; moreover, the pottery was of a style as yet unknown to me. The town wall started out in a line with the face of the temple; and it dawned on me that this could hardly be other than the town of the pyramid builders . . . ; so that it was evident that I actually had in hand an unaltered town of the twelfth dynasty, regularly laid out by the royal architect for the workmen and stores, required in building the pyramid and its temple.³

For the time, this was quite an unexpected statement and shows that Petrie considered the discovery of the town-site to be more important than the excavation of the nearby pyramid. In his archaeological report of Lahun, he provides detailed descriptions about the various categories of objects recovered, including pottery and tools (even those made of flint) – categories that had often been neglected at a time when objects were seen more as valuable pieces of art.⁴ He made many observations about architectural details and the methods of mud-brick building techniques, such as ceiling construction

and wall decorations, even describing street layouts and drainage systems.⁵ Unfortunately, his reports do not always specify the precise find spots of the objects he recovered during the excavations. This is mainly due to the fact that he used a large workforce of locals, who discovered these objects and brought them to him with the hope of receiving a monetary reward. This routine only allowed a broad description of where the objects were found. Recently, Carla Gallorini has made an attempt to tease out more details about find spots, especially for papyri at Lahun, by making use of Petrie's notebooks. Her aim has been to reconstruct the location of, and progress in, the various excavation areas where he worked during each season.⁶ Despite some shortcomings in view of modern standards, Petrie's work often remains the best and first source to be used when looking for information about a specific site. The details he observed are valuable because many of these sites are in a much worse state of preservation today than they were 100 years ago.

Slightly later than Petrie and the majority of his excavation work, two further examples of settlement archaeology in Egypt during the early twentieth century are noteworthy. This work was carried out at two important settlements by the Institut français d'archéologie orientale (IFAO) in the 1920s and 1930s at Tell Edfu in Upper Egypt and Deir el-Medineh on the Theban West Bank opposite modern Luxor (Figure 8.1). At Tell Edfu it is possible to follow the different research objectives,⁷ which started in the early 1920s when the *sebbakhin*⁸ were active and the IFAO held the concession for the Ptolemaic temple to the east of the tell. The initial task of the French mission was to watch over the *sebbakhin* for objects and papyri discovered during their digging activity along the sides of the tell.⁹ In the first report about work at Tell Edfu, Henri Henne states that initially the main objective of the French involvement at the site was to recover Greek papyri. During the first season, Greek documents and early Arabic and Coptic manuscripts were discovered. Henne realized that because of these rich finds, a more methodological excavation was needed in order to obtain important topographic and archaeological data. He explains that the research objectives at Tell Edfu were suddenly enlarged, a situation that was quite unexpected and was the only scientific way to proceed under the circumstances.¹⁰ Thanks to scholars such as Henne, the site of Tell Edfu was not entirely plundered and destroyed. Several field directors were assigned to the project over time, some of whom primarily had

papyrological training and received additional support from Egyptologists with an archaeological background, such as Fernand Bisson de la Roque. The potential for investigating a large town was quickly realized, and a certain part of the tell at Edfu was added to the already-existing concession of the IFAO for the temple, while the *sebbakhin* continued only in specifically designated areas and were able to exploit the excavation spoil heaps. Thus, from 1922 until 1933, archaeological reports containing site plans and descriptions of the finds and architecture recovered during excavations were regularly published. Although little attention was paid to the stratigraphy and the drawings often lack many details, showing several occupation phases together without any distinction, these reports are nevertheless precious sources of information.¹¹ From 1937 to 1939, a Franco-Polish collaboration was established, and three detailed reports were published about the work on the tell.¹² In total there are eight volumes that deal with the excavations of the ancient settlement and nearby cemetery.

At Deir el-Medineh, almost ten years were spent mainly on the excavation of the New Kingdom necropolis before embarking on the excavation of the workmen's village, which reflects the typical order of interest by the Egyptologists at the time. The concession of the site included three principal sections from the start: the New Kingdom necropolis, the Ptolemaic temple to the north, and an "agglomeration of houses, dating mainly to the New Kingdom."¹³ In the first statement of the project's objectives, the emphasis was on the systematic clearance of the entire concession area; only in 1931 did excavations begin to take place in a more organized fashion.¹⁴ However, the potential of the site was then quickly realized, and in the following years excavations at Deir el-Medineh unearthed one of the best-known settlements and communities for the Pharaonic period. Bernard Bruyère, director of the IFAO excavations, also emphasized in his first, more detailed discussion of the workmen's village that this fieldwork would shed new light on the evolution of the habitat during the New Kingdom.¹⁵ He elaborates on the special nature of the site as a royal foundation for the workmen of the royal tombs in the nearby Valley of the Kings. Excavations were conducted on an almost annual basis until 1951, and research related to this settlement is ongoing even now. The amount of detail has made Deir el-Medineh one of the key sites for understanding settlements in ancient Egypt during the New Kingdom, but its rather special nature requires caution when comparing it with

other places. In some publications, there are references to its “urban” character, which is not correct, because it falls into the category of a special-purpose settlement of non-urban character that was founded by the state.¹⁶ Deir el-Medineh has played a major role in understanding New Kingdom society, and data from the site concerning ancient Egyptian society and gender has been used in many different studies published over the past decade.¹⁷

The only other well-known settlement site from that time period was that of the New Kingdom royal city at Tell el-Amarna (Figure 8.1). The first concession had been held by a German team under the direction of Ludwig Borchardt of the *Deutsche Orientgesellschaft*, who excavated there from 1907 until 1914, before the First World War. Their right to the concession was lost after the war, and a British team led by Thomas E. Peet and others took over in 1921. The enormous potential of this site and its extraordinary finds, such as the famous head of Nefertiti, led to one of the best and only (!) fully mapped and, to a large extent, excavated royal cities of ancient Egypt. Excavation reports contain detailed plans of the site, and the recording of the domestic houses is included in the publications of Borchardt and Rieke well as Kemp and Garfi.¹⁸ Stratigraphic control was much less problematic there in comparison with that of the tell settlements elsewhere because few occupation phases could be distinguished due to the short fifteen- to twenty-year lifetime of this settlement.

It is not surprising that Amarna became the type-site for analyzing urbanism in ancient Egypt, and it has been frequently used within wider comparative studies on urbanism in antiquity. Lahun, Deir el-Medineh, and Amarna are the most commonly cited examples of ancient Egyptians towns and villages, even though all three show specific characteristics that cannot be easily transferred to other sites and cannot be considered overly typical for Egyptian towns and cities in general.

An exceptional case for the study of settlements in Egypt is Karanis, an agricultural town in the Fayum during the Ptolemaic and Roman periods. Even though these periods fall beyond the time frame of this study, it is worth mentioning the excavations conducted by the University of Michigan from 1928 to 1935 because they represent a degree of archaeological professionalism that attained almost-modern standards and can be regarded as a great exception for its time. The University of Michigan initially chose Karanis because of the Greek and the occasional Latin papyri that had been found there. Some of those had been purchased by the university's

museum in the early 1920s. As a direct consequence of these acquisitions, Francis W. Kelsey, then director of the Near East expedition, believed it was necessary to conduct a systematic excavation to learn more about the context of these documents that ultimately would contribute significantly to the interpretation of the papyri.¹⁹ The ancient settlement of Karanis was found to be in an excellent state of preservation despite the ongoing destruction carried out by a local Egyptian-Italian company extracting sebkah and earlier excavation work.²⁰ With the support of the Egyptian government, Enoch E. Peterson, field director of the excavations, was able to make a deal with the sebbakhin by offering them the excavation spoils. It was only possible to stop the extraction of the sebkah in 1931 when a new rule was established by the Antiquities Service that let the excavators designate the areas where the sebbakhin were allowed to work.²¹ The race against the continuously advancing sebkah diggers, which had, to a large extent, prescribed the methods used by the archaeologists, was finally over. Until then, not only had the proximity to the small railroad (Decauville) installed by the company in charge of the sebkah digging dictated the areas chosen for excavation, but it also restricted the choice to areas rich enough in fertile soil to satisfy the quantity given to the sebbakhin.²² As a consequence, this situation must have resulted in a constant race against time and the looming destruction, which probably accelerated the archaeologists' need to record as much as possible with uttermost precision because the finds would be lost forever. To some degree, the excavations at Karanis can be considered an early example of rescue archaeology, characterized by time constraints and the ultimate destruction of the archaeological remains.

Despite these difficult circumstances, the excavations carried out under Peterson show remarkable precision for recording the remains. Excavators were able to pay attention to the various occupational phases, which can be appreciated in the form of their detailed plans and profile drawings from the site. Some of the drawings depict profile cuts through large parts of the settlement, revealing the excellent state of preservation of the houses on multiple floors.²³ The care taken to precisely identify and record the settlement remains by taking into account the complex stratigraphy of a multiperiod tell site is unusual for early twentieth-century Egyptian fieldwork. Peterson's complete report of the excavations was never fully published because of its extensive size, but the finished manuscript is accessible at the Kelsey Museum in

Ann Arbor.²⁴ The fieldwork carried out by the University of Michigan expedition at Karanis is one of the best sources for the study of domestic architecture and the evolution of a settlement during the Ptolemaic and Roman periods. In addition, there was much effort made in investigating the settlement in its function as a vibrant agricultural town and its evolution over time. Such general reflections, considering the nature of ancient urbanism, were almost nonexistent at this time, when the retrieval of objects stood in the foreground of scientific interests. The unusually good state of preservation, recorded in full detail, makes Karanis the key site for our understanding of Egyptian settlements in the Fayum.

After these early settlement excavations, all of which stopped around or shortly after the Second World War, there has been much silence about the investigation of ancient Egyptian towns and cities. The 1952 Egyptian revolution led by Gamal Abdel Nasser also contributed, among other factors such as the emerging nationalism, to few excavations being conducted by foreigners in Egypt. In the aftermath of the revolution, several Egyptian Egyptologists were given directorships of larger excavation projects, and in 1953, for the first time since its inception in 1858, an Egyptian was finally put in charge of the Antiquities Service. Previously, only sporadic archaeological work was carried out by Egyptian citizens. For example, Selim Hassan, who excavated at Giza in the 1930s, stands out here. While not really concentrating on settlement archaeology, Hassan discovered the famous late Fourth Dynasty settlement of Queen Khentkawes.²⁵ In the introduction to his report, he explains that while trying to determine a place to deposit excavation spoils at the funerary complex of Khentkawes, he and his team stumbled upon mud-brick walls that curiously resembled those structures excavated at the Menkaura Valley Temple nearby.²⁶ In two seasons, from 1932 to 1933, Hassan was able to excavate the entire mortuary complex of Khentkawes, including the settlement he called “pyramid city.”²⁷ He immediately recognized its importance by the orthogonal layout and repetitive house layouts, which designate it as the earliest state-planned settlement in this region. Furthermore, he published a detailed plan of the site that is being used by scholars today. This settlement has, in retrospect, generated much interest for any research on ancient Egyptian towns and cities, and it is not surprising that Mark Lehner and the team of the Ancient Egypt Research Associates (AERA) took renewed interest in the site recently as part of their wider excavation work in the area.²⁸ Additional

settlement remains were excavated by Ahmed Fakhry at the Bent Pyramid complex at Dahshur, south of Giza. He conducted two seasons of excavations in 1951 and 1952 and a final short season to complete some work in 1955.²⁹

Any excavations in the Memphite region dealing with royal mortuary complexes traditionally were focused on funerary monuments such as the actual pyramids, the associated temples, and the private mastaba tombs surrounding them. All of these monuments were mainly constructed in stone and often contained decorations of high-quality reliefs and painted walls. Settlement remains made of mud brick were discovered more or less by chance and often received limited attention as to their role and function within the funerary complexes. They were not really considered main objectives of the fieldwork projects in the Memphite necropolis. Thus, most of the 1950s and 1960s were relatively quiet for settlement archaeology and urban research in Egypt.

Despite increasingly nationalistic views on archaeology and the favored employment of Egyptian archaeologists, when the Nubian Nile Valley was threatened by planned flooding resulting from the construction of the Aswan Dam in 1954, President Nasser, together with the Sudanese government, called for international help.³⁰ This led to one of the most spectacular salvage campaigns in history and was conducted on an unprecedented scale by numerous surveys and excavations, carried out by a large number of international institutions and universities.³¹ The area to be covered stretched about 500 km from north to south along the Nubian Nile Valley, of which about 350 km lay in Egyptian territory. For a limited duration of five years, the threatened area had to be investigated by archaeological fieldwork as precisely as possible and any necessary salvage of monuments carried out within this time frame!³² The whole operation faced many difficulties, especially of a logistical nature, in the scarcely populated area along the Egyptian Nile Valley in Nubia, a region much better known archaeologically than its Sudanese counterpart. To increase the efficiency of identifying archaeological sites, the French Institut Géographique National, in collaboration with the Egyptian Military Survey Department, took aerial photos and provided detailed topographical mapping of the whole area in question.³³

Although the stone monuments were dismantled and rebuilt on higher ground not prone to flooding by the artificially created Lake Nasser, any mud-brick architecture was inevitably lost. The excavations carried out by many international teams concentrated on all periods of

ancient Nubia and led to the excavation of a string of Middle Kingdom fortresses that had lined the river banks in Lower Nubia. These sites were much larger than the easily visible fortress constructions, often including surrounding settlements and additional installations in the vicinity. Excavations proceeded with as much care as possible within a relatively limited time frame, but still, in many cases, this came at the cost of losing approximately 50 percent of the archaeological evidence.³⁴

Despite these shortcomings, the UNESCO rescue and salvage campaign can be seen as a major success on an unprecedented scale:

At the most practical and immediate level, that of salvaging material and of salvaging knowledge from destruction, far more and far better archaeology was done in Nubia between 1960 and 1970 than ever had been done anywhere in the Nile Valley, or in most other parts of the world for that matter. Although the sites that were actually dug did not constitute more than one-third of the total volume that was destroyed, this represents a much fuller archaeological sample than we have from almost any other part of the world.³⁵

Much of its value and success lies in the fact that a wide range of periods were covered, from prehistoric to medieval times. It has never been possible to study the cultural evolution of Nubia over such a long time period. The UNESCO campaign ended officially in 1980, and much of the data has been published since then. The excavation reports are mainly descriptive in nature, providing much detailed archaeological data, numerous photographs, and many plans, but more-analytic studies on Egyptian history in Nubia and regional identity have been appearing in recent publications.³⁶

Whereas the UNESCO campaign led to an outstanding collection of data from cemeteries and settlement sites in Nubia, the heartland of the Pharaonic civilization was stagnating in terms of archaeological fieldwork on settlements. This provoked John Wilson at a symposium in 1958 on "Urbanization and Cultural Development in the Ancient Near East" (held at the Oriental Institute, University of Chicago) to describe the rather unsatisfactory situation of settlement archaeology in Egypt to his colleagues, many of whom were Mesopotamian archaeologists. Often cited as the perfect example of misinterpretation by Egyptologists but too often stated as a fact by specialists in related fields and comparative studies, the leitmotiv for the ancient Egyptian civilization chosen by

Wilson was entitled "Egypt through the New Kingdom: Civilization without Cities."³⁷ In order to put this statement in the right context, one can argue that in 1958 there was less evidence for towns and cities available than there is today, and the known sites were restricted to Deir el-Medineh, Lahun, and Amarna, with little archaeological evidence from other important cities such as Memphis, Thebes, Heliopolis, Hermopolis, Abydos, and Sais. These towns and cities were known from textual records as being important administrative and religious centers as well as serving as national capitals during different periods of ancient Egyptian history, but their full extent and layout was completely unknown at the time. Wilson argues:

Yet Egypt, the nation had nothing which can be recognized as a city in modern terms, to serve as the firm and fixed heart of a large political organism. Egypt was an agricultural land, crowded with agricultural villages, some of which waxed into temporary importance and then waned again. To be sure, Egypt had its important capitals such as Memphis from about 3000 B.C. and Thebes from about 2000 B.C. To be sure, there were important focal towns such as Sais, Heliopolis, Hermopolis, and Abydos. It is also true that we do not know definitely the size and complexity of these towns, because exploration and excavation in Egypt cannot achieve the same results as they do in Mesopotamia. The old towns lie too deep under the alluvium or under modern life. However, what little we do know from excavation does not suggest any large and continuing size for such places as Memphis, Heliopolis, and Thebes.³⁸

Wilson's leitmotiv in the context of this statement makes clear his point. If an urban center or a city is defined in terms of size, especially in comparison with the city-states in Mesopotamia and what was known at the time of Egypt itself, surely the Egyptian evidence pointed to a nation-state without urbanism. To some extent, it was Wilson who attracted attention to the fact that the study of urbanism was less than satisfactory in the field of Egyptian archaeology.

Egyptian settlement archaeology took a decisive turn in the 1970s with the appearance of three scholars: Barry Kemp, Manfred Bietak, and David O'Connor. Ever since the international and interdisciplinary colloquium held at University College London in 1970, in which all three authors participated, the importance of Pharaonic-period towns and cities, including questions about their urban

nature, were suddenly a new direction for research.³⁹ This interest also generated studies of the ancient Egyptian environment and the local geographical settings that influenced the development of settlement sites. These three scholars have considerably advanced our notion and understanding of Pharaonic settlements by investigating questions about urbanism and urban society in Egypt in the 1970s and '80s. First, attempts to assess demographic trends and the size of cities were undertaken.⁴⁰ It is noteworthy to point out that two key articles published by Kemp and O'Connor, respectively, emphasize the presence of deeply stratified tell sites being part of the urban phenomenon in the Nile Valley during the Pharaonic period.⁴¹ None of the early twentieth-century excavations of tell sites (e.g., Elephantine and Edfu) had concentrated on Pharaonic-period remains. They had dealt mainly with the Ptolemaic and Roman periods, because those were the uppermost occupation levels at these abandoned mounds, which had been further enhanced by the search for papyri. The Kemp and O'Connor studies completely revolutionized our understanding of the urban past of ancient Egypt and were a major step toward investigating the social and anthropological aspects of this ancient civilization. In addition, Karl W. Butzer compiled the first study of the ecology of ancient Egypt by bringing together environmental parameters, geographical differences, and an assessment of settlement patterns for Egypt that even today are an important contribution to scholarship.⁴² More recently, several additional studies have appeared on demographic aspects and settlement size estimates, but none provides much new information since the time of Butzer's publication.⁴³

While these scholars can be considered the first to have made attempts to understand the ancient Egyptian culture from a social perspective, they also stand at the beginning of a new era of large-scale excavations and surveys concerning several key settlement sites. Bietak, in conjunction with the Austrian Institute of Archaeology in Cairo, started fieldwork at Tell el-Dab'a, a major town in the eastern Delta, from 1966 to 1969, and then continued work from 1975 to 2011 as director.⁴⁴ Excavations at Tell el-Dab'a are ongoing today under the direction of Irene Forstner-Müller, who became the head of the Austrian Institute in Cairo in 2009. In the south of Egypt, the fieldwork at Elephantine was started as a project of the German Archaeological Institute in Cairo (DAIK) under the direction of Werner Kaiser in 1969 and is ongoing, having contributed enormously to our knowledge of an

Upper Egyptian settlement in the First Cataract region. At Tell el-Amarna, fieldwork was taken up again after a long pause in 1977 and is currently directed by Barry Kemp and the Egypt Exploration Society.⁴⁵

These major projects on urban life and sociocultural aspects have contributed immensely to a better understanding of towns and cities in ancient Egypt. A wealth of data about these sites is now available, and they present a more concise analysis of settlement patterns and characteristics.

In a similar spirit, Michael Hoffman, codirector of excavations at the Predynastic settlement of Hierakonpolis in southern Egypt, started a multidisciplinary project there that was much influenced by his background in anthropology.⁴⁶ Up until then, understandings of the Predynastic Period of history in Egypt had mainly been based on the interpretation of several key objects and monuments, while the full potential of doing studies of the often badly disturbed archaeological remains was only gradually recognized. Hoffman's 1982 report of fieldwork at Hierakonpolis is an excellent example of the multifaceted research approach that was being employed by an interdisciplinary team studying the rise of complex society in Egypt.⁴⁷

Thus, by the early 1980s, an increasing number of specialists became routinely involved in fieldwork projects that had a positive impact on our understanding of urbanism in ancient Egypt. Excavation teams were formed by international groups of scientists focusing on research objectives closely linked to the social sciences since the 1970s.⁴⁸ The results from the studies of faunal and archeobotanical remains as well as the ceramic material were increasingly included in the final excavation reports. The importance of analyzing faunal and floral material from settlement sites lies in its integral role in understanding the uses of plants and animals by the inhabitants of such sites, in addition to their role in the local economy. Such analyses also shed important light on the local diet, which seems to have varied according to social status. Prominent specialists who have been working on Egyptian fieldwork projects since the late 1970s are, for example, Joachim Boessneck and Angela von den Driesch, both of whom not only have an extensive record of publications concerning the analysis of faunal remains in Egypt but also conducted substantial work at other sites of the ancient Near East.⁴⁹ More recently, Richard Redding has been doing important work on faunal remains at the site of Heit el-Ghurab in Giza and in the past at the settlement of Kôm el-Hisn in the Nile Delta.⁵⁰

Floral remains have been mainly investigated in view of evolving climate conditions and the role of various plants in the ancient Egyptian economy. Wilma Wetterstrom, one of the specialists in this field, started with an analysis of archeobotanical remains obtained during the excavations of the Roman and Early Islamic-period site at Quseir el-Qadim, situated on the Red Sea coast.⁵¹ Because the local environment did not allow for a large amount of vegetation, Wetterstrom was able to closely investigate the samples of plant remains from the excavation, which represent mainly imported specimens used for food, fodder for livestock, and building materials. Scientists such as Delwen Samuel have also focused on floral remains – specifically grain – in order to shed light on food-processing practices such as bread and beer production by conducting microscopic residue analyses.⁵² Her work also involved a significant amount of experimental archaeology, which has led to a better understanding of the practices involved in producing staple foods, including bread and beer. Additional archeobotanical studies relating specifically to settlements at Giza and the Predynastic settlement site of Adaima have been carried out by Mary Ann Murray and Claire Newton.⁵³

As far as ceramic studies are concerned, those had rarely received attention until the 1970s, with the exceptions of Kaiser's work on Old Kingdom pottery from the Userkaf sun temple in the Memphite region, which was published as a chapter in Herbert Rieke's 1969 report,⁵⁴ and George Reisner's earlier publication on the Giza necropolis.⁵⁵ A more formal methodology for ceramic analysis was established by a small group of researchers in the 1970s, among them Dorothea Arnold and Janine Bourriau, who recognized the need to improve the study of pottery from simple methods of seriation, based on Petrie's work, to include analyses of the clay components (e.g., fabrics), surface treatments, decoration, and manufacturing methods of ceramic vessels. Their work started with material from key sites such as el-Lisht, Thebes, and Dahshur.⁵⁶ Pottery is one of the most ubiquitous finds when excavating settlements or conducting surveys and is the most important tool for establishing the relative chronology of each site. It has now become its own subdiscipline within the field of Egyptian archaeology, with many specialists working on establishing ceramic typologies, analyzing imports, and carrying out fabric analyses.⁵⁷

Advances in archaeological methods and technologies over the past two decades have improved settlement archaeology considerably and dominate twenty-first-century urban research. Of special importance is the

increasing use of geophysical survey methods, including geomagnetic readings and the use of ground-penetrating radar, which allows not only a much more accurate assessment of a site prior to excavation but also has the advantage of being noninvasive. One of the first studies that realized the potential benefits of using geophysical methods in Egypt is at modern Qantir, ancient Pi-Ramesses in the eastern Delta, the former capital of the Nineteenth and Twentieth Dynasties.⁵⁸ Recently, the spectacular results throughout the entire region of Tell el-Dab'a, a city to the south of Pi-Ramesses, have received much attention and led to a better grasp of the enormous size of this urban site in the eastern Delta, which covered more than 200 ha around 1650 BCE.⁵⁹ Similarly, a geophysical survey at the city of Buto in the northern part of the Delta, encompassing three tells, has also provided precise evidence for layout and organization.⁶⁰ It is now almost the norm that before starting excavation work there should be a geomagnetic survey as part of site reconnaissance whenever conditions allow for it. This helps in being more precise in choosing areas of interest and for formulating concrete research questions.⁶¹ In addition, satellite imagery and aerial photographs, often in the form of declassified military material, are extremely useful when identifying sites and tracing their long-term evolution and current state of preservation. These methods add to the clarity of the results when used in conjunction with survey work on the ground.⁶²

Thus, Egyptian settlement archaeology in the twenty-first century is much governed by the development of new technologies that improve the quality of recording and preserving archaeological remains.⁶³ Nevertheless, it can be observed that excavation techniques, research objectives, and the quality of publications differ greatly from site to site. Even now, in 2014, it is possible to occasionally encounter substandard fieldwork that should be considered problematic, even while high-quality work is available from the majority of sites and projects. These extremes are linked to the fact that every mission develops its own specific methodology of excavating and recording settlement remains and has different technical support and equipment, which can range from a total station or differential GPS equipment to simple triangulation methods and tape measures. Even the field of ceramic studies has certain discrepancies in the methods applied for analyzing pottery. One goal for the future should be some basic guidelines to which archaeologists working in Egypt can and will ascribe. Settlement archaeology stands as one of the most complex types of

fieldwork and includes incredibly detailed stratigraphies of tell sites in the Nile Valley, a phenomenon that has already been successfully tackled by the majority of archaeologists working in the Middle East. Egyptian settlement archaeology is still at a relatively early stage compared with the studies of other Near Eastern counterparts – having to face certain difficulties such as seabed destruction, groundwater problems, and wet soil, especially in the Delta, or growing agricultural exploitation and modern settlement. The colorful history of research into ancient Egyptian settlements in general, as summarized here, has had a great impact on what data and published material are currently available for the study of this topic. As mentioned in the introductory chapter, these are some of the reasons for the uneven amount of quantitative as well as qualitative data available. Another aspect of settlement archaeology and urban studies on ancient Egypt that needs to be addressed is their role and use in comparative studies, which also highlight some of the persisting problems within the field.

2.2 THE ROLE OF EGYPTIAN SETTLEMENTS IN INTERDISCIPLINARY STUDIES ON ANCIENT URBANISM

Despite evidence to the contrary, there are publications that have appeared over the past ten or fifteen years that still refer to Egypt's nonexistent urban life, following the thread of John Wilson's discussion from 1958. Therefore it is necessary to address the role of Egyptian urbanism and settlement studies within the wider framework of ongoing research and comparative studies on urbanism in ancient societies in general. The discussions concerning Egypt and the roles that have been assigned to Egyptian examples are often quite problematic. As will be outlined in the discussion that follows, ancient Egypt is rarely included in such interdisciplinary and comparative studies, and if it is, the citations are often misrepresented or misunderstood. This is partially related to the fact that there is no overarching analysis of ancient Egyptian urbanism, and researchers from neighboring disciplines, trying to incorporate Egyptian examples, usually fall back on the publications and studies that are most accessible, on the few sites such as Lahun, Amarna, and Deir el-Medineh. They do not take into consideration that these are not necessarily the most representative case studies of ancient Egypt. General and analytical publications often use only these three settlements and do not consult additional site reports that present detailed archaeological data

because many of those include little or no interpretation within the wider framework of settlement archaeology. The following examples used to better illustrate this trend are a selection of various older and newer publications that focus on Egyptian settlements within a broader evaluation of urbanism in the Old and New Worlds and provide a critical review of current issues that need to be addressed.

In 1968, Paul Lampl investigated the issue of town planning in ancient Egypt in his book entitled *Cities and Planning in the Ancient Near East*.⁶⁴ Lampl includes more archaeological evidence than many other authors of comparative studies at this time and discusses less well-known examples of cities in Egypt, such as Buto, Avaris, and Elkab.⁶⁵ In relation to town planning efforts by the state, Lampl recognizes that the typical ancient Egyptian city showed little planning and emphasizes that “we have to visualize the housing and commercial districts of the Egyptian city growing in an indiscriminate way within the available space around the temple or palace without preplanned layout or zoning.”⁶⁶ Nevertheless, he also concludes that the state was clearly involved in town planning when this planning served its interests. Lampl's publication is a rare example of where urbanism and the role of town planning are investigated through the lens of a more varied data set.

A couple of years later, Mason Hammond published a study entitled *The City in the Ancient World*, which deals with the urban phenomenon, mainly focusing on the Classical period of ancient Greece and Italy.⁶⁷ The author, who has a background in Latin and classical antiquity, states in the introduction that the initial motivation for writing this book came from the need to understand the origins of urban forms during the Roman period.⁶⁸ On this quest, Hammond recognized the need to delve much deeper into history and investigate the origins of urbanism in the ancient Near East. The case of Egypt is also discussed, amongst other cultures, but Hammond draws heavily on John Wilson's earlier evaluation and concludes that the Egyptian civilization was characterized by an extremely hierarchical society, in which “cities had no independent existence and played no major part in the history or economy of Egypt.”⁶⁹

After Wilson's statement in 1958, which had remained the key evaluation on ancient Egyptian urbanism up to then, a major step forward for the research concerning settlement patterns and urbanization in ancient societies took place at the international meeting organized in

December 1970 by Peter Ucko, Ruth Tringham, and George W. Dimbleby at the Institute of Archaeology, London University.⁷⁰ In an eighty-five-article volume published two years later, eight papers focused on Egyptian urbanism and settlements, included within the subsection of [Chapter III](#) entitled “Urban Settlement.” These articles by David O’Connor, Barry Kemp, Harry Smith, and others clearly reflect a considerable advancement from the previously held view on Egypt’s nonurban past. Thirty-eight years later, one wonders where research on Egyptian settlements stands now and how it has evolved. In theoretical and interdisciplinary discussions on settlement archaeology, Egypt appears to be playing much less of a role than it did in the 1970s. Egyptian examples (and often the wrong ones and always the same ones!) feature infrequently in general archaeological studies and discussion.⁷¹ In publications in which they are included and discussed, they are featured in overgeneralized terms and without much detail. This can be further illustrated by a small selection of examples.

Recently, Charles Gates has published a comprehensive overview on urban life in antiquity, which is organized in a fashion very similar to Hammond’s book.⁷² Gates is specifically investigating cities and urban life in ancient Italy and Greece but also draws on evidence from neighboring civilizations in the eastern Mediterranean and ancient Near East. Egypt is dealt with in two chapters consisting of a concise summary of the archaeological and historical context of the ancient Egyptian civilization. Most of the chapters focus on monumental stone architecture (pyramids, tombs, and temples), and limited consideration is given to examples of urban forms and sites. Amarna and Lahun feature in more depth, in addition to a short presentation of the Middle Kingdom fortress at Buhen in Lower Nubia. However, no conceptual framework or specific analysis is provided for the urban settlement system in Egypt.

A collection of studies published in 2006, edited by Glenn R. Storey and titled “Urbanism in the Preindustrial World,” also demonstrates the nonexistent role of ancient Egyptian urban sites within the current debates on premodern urbanism.⁷³ The only contribution in this publication that centers on Egypt is about the Roman period, authored by Robert Bagnal.

Norman Yoffee discusses the process of early urbanization in different regions of the world, and his examples range from Mesoamerica to Mesopotamia. Although the thrust of his work is early Mesopotamia, examples from Egypt are included in his outline. He is looking

particularly at population estimates and notes, correctly, that in many instances “. . . none of the earliest cities [in Egypt], whose enormous extents are apparent, has been more than partially excavated. Archaeologists have estimated the extent of some sites according to residential debris and sherd scatters. Although the populations are little more than best guesses, the earliest cities were densely occupied.”⁷⁴ He provides plans of Thebes, Amarna, and Deir el-Medineh⁷⁵ and includes a basic plan of Hierakonpolis and the Memphite regions.⁷⁶ Yoffee emphasizes the presence of urban settlements in Egypt, but he fails to present more-precise plans or data in his outline, or any concise definition of what urban means for the various cases he discusses. This is a frequently encountered problem linked to the difficulty for scholars outside of Egyptology of accessing relevant publications.⁷⁷ Yoffee bases his urban evidence for Egypt on plans of a few key sites and puts them within the context of the rising state and social complexity, which includes the proposed model by Kemp of the various stages leading up to the unification of the Egyptian state.⁷⁸ Kemp proposes that one of the phases toward state formation was the presence of smaller “incipient city-states” such as Hierakonpolis and Naqada, which were regional power centers. However, there is little conclusive data about the layout, size, and internal organization of these early cities.⁷⁹ Abydos is equally problematic, as there is much evidence for elite cemeteries of the Predynastic Period, followed by the royal cemeteries of the Early Dynastic Period, but there is no data from the contemporary settlement. Early rulers, such as King Scorpion, who had been interred in the well-documented tomb of U-j (ca. 3200 BCE, see [Figure 4.2](#)) at Abydos, were clearly able to control a considerable amount of resources and establish a complex trade network that is witnessed by the numerous foreign burial goods in the tomb complex.⁸⁰ Labels written in ink on pottery vessels and ivory tags provide the first indication for the existence of agricultural estates controlled by these early rulers. No archaeological data about a possible residence and seat of administration of these rulers has been found. Textual evidence names the site of Thinis as the capital and residence for the earliest rulers of Egypt. Thinis lies 20 km to the northeast of Abydos ([Figure 4.1](#)), but again there is almost no archaeological data available from that site.

Much of Yoffee’s discussion concentrates on estimates of settlement size and populations, which are highly problematic for ancient Egypt, as has been outlined in [Chapter 1](#). He also makes an important point in his

analysis of cities and city-states and the close connection between “urbanization” and “ruralization.” He emphasizes the economic roles of urban and nonurban dwellers and indicates that there might not have been a strong dichotomy among them because many inhabitants of cities also owned large agricultural estates.⁸¹ Yoffee’s study on the archaic state uses evidence for early cities and urbanism closely linked to the emergence of early states, and others have conducted research on ancient urbanism using similar comparative approaches. Bruce Trigger, for example, published a comprehensive volume on the comparative nature of early civilizations in which one entire chapter is dedicated to the urban question.⁸² In this chapter, he provides a detailed overview about what can be considered urban characteristics and also makes an enlightening comparison between urban forms in city-states and territorial states. While his study remains on a broad comparative level, the various factors and characteristics he describes are clearly applicable to ancient Egypt. Trigger’s methodology is an effective way to analyze ancient urbanism in view of the archaeological and textual sources.

Two additional publications need to be mentioned, as they use examples from ancient Egypt, unfortunately often in a problematic way, a consequence of the relative inaccessibility of data. In Roland Fletcher’s theoretical study from 1995 on *The Limits of Settlement Growth*, Egyptian towns feature sparsely.⁸³ He uses a sketch plan of Abydos to explain the spatial segregation of settlement space: “Abydos is divided into two main enclosures bounded by thick walls with an additional smaller, central enclosure.”⁸⁴

Fletcher made these observations of the case of Abydos: “a large settlement which operates as if it were several small settlements fitted together would serve to contain the problem of increasing spatial variability. The rise within each discrete part of the large settlement in the variation of its spatial message would be relatively small. To be effective, the major segregators must obstruct or restrict direct access across the settlement.”⁸⁵

In this context, Abydos is certainly not the right choice. The enclosed areas are first of all reconstructed and based on small surviving parts of several different enclosure walls. As the complete site has not yet been the object of an intensive excavation, it is also problematic to see all of these areas being contemporary. Furthermore, a temple enclosure wall was separating the sacred space from the rest of the town and does not constitute an enlargement of the settlement area. Another rather disconcerting

observation is that Fletcher refers to Kemp’s article on Egyptian settlements from 1977 for his sketch plan of Abydos, but in the original illustration, much more detail is provided and the various chronological periods as well as the temple precincts are noted. This is an oversimplification of the archaeological evidence and does not contribute to any wider theoretical analysis, which was the goal of Fletcher’s book.

The final example presented in this discussion relates to Linda Manzanilla’s work entitled *Emergence and Change in Early Urban Societies*, which contains the proceedings of a conference held in Mexico City in 1993.⁸⁶ She writes in her introductory chapter, “The lack of true urban centers in Egypt removed the contrast of rural and urban sectors that was so characteristic of Mesopotamia. Information flow along the Nile, between the central government and the provincial administrations, favored a network of relationships without cities, which were in part unnecessary due to the absence of market exchange.”⁸⁷

Here a mix of different unverified statements that would be worth discussing individually are thrown together. Again, the main assumption remains that Egypt lacked “true urban centers,” a comment already refuted in the chapter by Kathryn Bard, one of the contributors to this symposium.⁸⁸ Bard focuses her conference article on the settlements of Predynastic Egypt and the emergence of the early state, repeatedly noting the lack of archaeological evidence for settlements. She closes her discussion by emphasizing that the administrative system and the appearance of complex society that can be witnessed primarily by funerary evidence strongly suggests that the “capital and state administrative (nome) centers were certainly urban communities, but they were probably less agglomerated in plan than the contemporaneous city states in southern Mesopotamia.”⁸⁹

In conclusion, the above considerations and examples clearly illustrate the common problems encountered in wider comparative studies and interdisciplinary works and do not adequately represent the current state of research on ancient Egyptian towns and cities. One aim of the current study is to remedy the situation by providing a much larger basis of analyzed data, including detailed site plans that can be used by scholars in neighboring disciplines as well. For more than thirty years, scholarly work dealing with towns and cities has consistently cited the same examples: the royal capital at Amarna in the New Kingdom, the state-planned settlement at Lahun (Kahun) in the Fayum region, and the worker’s village at Deir el-Medineh on the Theban West

Bank. These are only a small part of the full spectrum of settlements in ancient Egypt and cannot be considered the most typical examples. The reason these sites are repeatedly noted in studies is due to the fact that they constitute those few sites that have been analyzed on a wider level, including discussions about their roles and functions but also aspects about their inhabitants and social structure. As a consequence, they are more easily accessible for nonspecialists. As outlined in this chapter, settlement archaeology in Egypt has now reached the stage where a wealth of data is available from site reports that need to be included in any investigation of the urban nature of ancient Egyptian society and its related settlement system.

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The Environmental Setting

3.1 INTRODUCTION

Any study focusing on ancient Egyptian urbanism has to take into account the specific environmental conditions of the Nile Valley and the Delta, which had a major impact on the location and development of settlement sites. The geographic setting of Egypt and the inherent environmental factors not only shaped the urban life of the ancient Egyptians but also effect settlement archaeology today to the extent that they have a great impact on how evidence for ancient towns and cities comes to be preserved. Studies of the ancient environment and climate are key issues for any investigation concerning ancient civilizations, and it is the task of the archaeologist to include such matters in the analysis of fieldwork data. As has been clearly demonstrated by the regional survey carried out by Robert McC. Adams for Mesopotamia, the landscape and environmental settings play a major role in a better understanding of the overall settlement system and the interaction between cities and the rural hinterland.¹ Such a comprehensive study is not yet available for Pharaonic Egypt, but there is an increasing trend in investigating river movement, flood levels, and local geography, as well as aspects of short-term and long-term climate change.

3.2 ENVIRONMENTAL SETTINGS FOR ANCIENT SETTLEMENTS IN EGYPT

3.2.1 The Nile flood in prehistoric and Pharaonic times

One of the dominating phenomena – which the current generation is not able to witness anymore but is crucial to our understanding of the ancient Egyptian civilization – is the annual Nile flood. With the completion of the Aswan

High Dam, the natural flood cycle that had affected life in the Nile Valley and Delta for millennia came to an end. The last Nile flood happened in 1964 and has been considered the biggest flood of the twentieth century (Figures 3.5 and 3.6).²

During the early Holocene period, around 8500 BCE, there was a shift to wetter climate conditions initiated by a rise in global temperatures and the northward progression of the Intertropical Convergence Zone (ITCZ), causing increased rainfall over the Ethiopian Highlands and the southern Sahara. This climate episode has been termed the “Holocene Wet Phase,” and it affected Egypt to the extent that it brought summer rains to the regions of Lower Nubia and southern Egypt.³ In addition, a large influx of seasonal water of the Blue Nile came from the Ethiopian Highlands, causing the annual flood surge, which was much stronger and irregular than during the Pharaonic period. The Nile was also fed by the less strong but more constant flow of the White Nile, originating in the Equatorial plateau.⁴ It has been suggested that these more humid conditions and relatively high flood levels favored human occupation along the desert edge and in the wadis, which were also used for seasonal pastoralism. The high floods would have made settlement close to the river very difficult, and it is therefore not surprising to find that most of the early Predynastic settlement spread some distance to it. The long-term evolution of settlement patterns has been well studied in the region of Hierakonpolis in southern Egypt, where a large sprawl of settlement dating from the early Predynastic Period (ca. 3800–3400 BCE) has been detected along the desert edge and the main wadi (Wadi Abu Suffian). However, a gradual movement toward the floodplain and an increased density in settlement can be observed from the later Predynastic Period (ca. 3400–3200 BCE) onward

(see Figure 4.19).⁵ Similar results have been obtained in a recent study focusing on the effects of climate variability on prehistoric settlement patterns.⁶ Although the wetter conditions during the early Predynastic Period permitted people to settle along wadis and especially favored were zones where the wadi mouths reached the Nile Valley, the change to drier conditions forced people to move closer to the floodplain, which had become habitable because of lower and less-erratic floods. Climate records also indicate that the Holocene Wet Phase came to an end that was not abrupt but, rather, declined over a long period of time, with several short episodes of low floods and drier conditions.⁷

The changes in habitat certainly had a profound impact on local communities and their lifestyles during the Predynastic Period, making foraging much less reliable, for example, and requiring this food source to be supplemented by other means of subsistence. There is evidence for an intensification of farming practices, the keeping of domesticated animals, and an increase of storage facilities, all of which are clearly linked to the variability in the climate affecting the flood regime.⁸ An additional factor that also played a role in this development seems to have been a rise in population numbers and a possible over-exploitation of natural resources such as firewood, which would have certainly added to the effect of destabilizing an already fragile ecosystem along the desert margins.⁹ The archaeological evidence and results from paleoenvironmental studies demonstrate clearly that early settlement as well as the strategies employed for subsistence were adapted and evolved around the changing environmental conditions in the floodplain. The beginnings of agriculture in the Nile Valley can be traced to about 5200 BCE – a period characterized by an abrupt drop in flood levels when the first evidence for domesticated cereal is indicated – but it was not until about 3400 BCE (Naqada IIC period) that agriculture had completely taken over life in the Nile Valley.¹⁰ In addition, it is possible to observe the gradual evolution from natural to artificial basin irrigation, which resulted in the creation of a complex system of canals, artificial basins, and dikes allowing for at least one crop per year. The first image of the king cutting an irrigation ditch dates to the Early Dynastic Period during the reign of King Scorpion.¹¹ As Karl Butzer has emphasized in his study on the cultural ecology of Egypt, the role of artificial basin irrigation had an important part to play in the emergence of the ancient Egyptian state.¹²

The Holocene Wet Phase ended about 2450 BCE, and at that time Egypt began to experience the climate

conditions that it currently has.¹³ Under these conditions, the water level would rise from the middle to the end of August and flow through channels and cuts along the lower levees to fill the numerous flood basins, transforming the valley into a large lake-like landscape (Figures 3.2 and 3.3). It could take between forty to sixty days for waters to recede (Figure 3.1). The average depth of the water filling the basins was between 1.25 m and 1.5 m for the region of Upper Egypt in the nineteenth century, whereas the Delta received less and the flood arrived later in the year.¹⁴ Historical and modern records of variations in the flood level show that both low and high floods could have had devastating effects on the annual crop yield.¹⁵

For the Pharaonic period there are few textual sources that contain records of measured flood levels, which would help to better understand long-term trends and short-term fluctuations. One exception is the Palermo Stone, which contains the annals of Dynasties 1 to 5, including flood heights. Although it is not clear how and where these heights were measured, the records indicate that flood levels declined by about 1 m between Dynasties 1 and 2.¹⁶ In some cases archaeological data has been a helpful addition, such as the excavations at Elephantine, which provide some information about a general decline in the height of the Nile floods at the end of the third millennium BCE.¹⁷ In addition, geological evidence and pollen records obtained in the Delta have further corroborated a decrease in the height of the Nile floods affecting ancient Egypt around the same time.¹⁸ The Middle Kingdom seems to have been a time with rather high floods, deduced from several exceptional flood markers in the Second Cataract region in Lower Nubia at the site of Semna and an inscription of Sobekhotep VIII with a description of flooding that occurred at Karnak Temple in Thebes.¹⁹ Archaeological data from Memphis and the Delta seems to confirm this trend too.²⁰

3.2.2 The geomorphology of the Nile Valley

The Nile Valley is a “convex” river floodplain where the highest ground was situated along the banks of the river and lower-lying basins were found close to the outer edges of the valley, near the desert fringe (Figure 3.4).²¹ Elevated levees formed along the banks of the main river channel and also along its branches, through the process of coarse sediments being deposited in larger quantities closer to the river and the finer sediments distributed into



3.1. View of the Nile Valley showing the receding floodwaters, from the top of the Khufu pyramid at Giza. © Dr. Edouard Lambelet, Lehnert & Landrock – Egypt

the lower basins of the floodplain.²² The height of the riverbed and its embankments could rise faster than parts of the floodplain, which frequently caused the river to change its course, creating a braided appearance with islands in the Nile.²³ The meandering river course of the active Nile channel created higher-lying levees throughout the floodplain, many of which have been used for settlement in antiquity until modern times because they provided good protection from the

inundation. Those levees close to the main river channel were also used to contain the floodwaters and often saw reinforcements and a rise in height, which helped control the water flow. The foundation of settlements on such higher levees led to the development of permanent settlements; these were inhabited for long periods of time and gradually grew in height, forming so-called *tells* or *kôms* that are artificial mounds created by superimposed settlement layers. Thus, towns and villages within the



3.2. Pyramid at Giza and the flooded Nile Valley in the foreground. © Dr. Edouard Lambelet, Lehnert & Landrock – Egypt

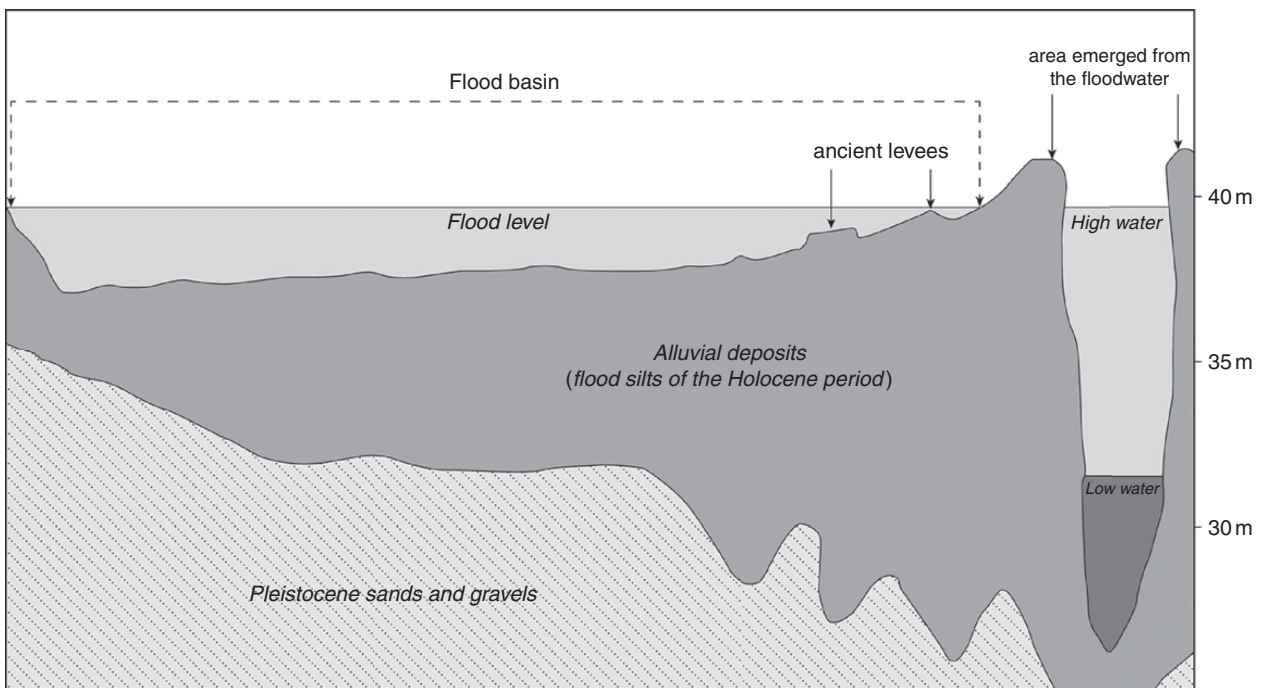
floodplain did not grow much horizontally but had a tendency to evolve vertically. This vertical trend was further enhanced by the fact that sundried mud bricks were used as the main building material – one that could easily be dismantled and rebuilt according to the individual needs of the inhabitants. The stone temples are one of the principal features of early urban centers from the Middle Kingdom onward, and those remained much more static than other structures, even after phases of renovation and rebuilding, a situation that has led to the phenomenon of temples being the lowest-lying structures, with continuously growing settlements rising around them.²⁴

There is also evidence for the use of natural bedrock formations for settlement close to the river, in addition to the levees. For example, the regions of Gebel es-Silsila, Edfu, and Gebelein in Upper Egypt (Figure 5.1) show evidence for stone formations and outcrops that had an advantage similar to that of levees, providing elevated,

dry, and stable ground for settlement while also offering good access to the river. Only a few examples from Upper Egypt have been recognized as such formations, but many more certainly exist along the Nile Valley, up to the apex of the Delta. Such formations often remain invisible because of the alluvial deposits and the settlement accumulations on top of that. The remains of the ancient town at Tell Edfu, which are situated about halfway between the modern towns of Luxor and Aswan in the south of Egypt, is such an example – where the ancient and modern settlements cover the natural bedrock almost completely. In this case, had it not been for two special circumstances, the fact that this ancient urban center was founded on a sandstone outcrop and not on an ancient levee formation would have remained unknown. Some of the bedrock was uncovered when parts of the site were quarried away for agricultural fertilizer (*sebakh*, see following discussion), and further confirmation about the rock formation has been obtained from several drill



3.3. Inundated floodplain at Dahshur. © Dr. Edouard Lambelet, Lehnert & Landrock – Egypt



3.4. Idealized cross-section across the Nile in Upper Egypt. By G. Marouard, after R. Said, *The River Nile: Geology, Hydrology, and Utilization*, Oxford: New York 1994, 56, fig. 1.23.



3.5. Aerial view of the inundated Nile Valley near Qena in 1964. John Feeney Collection, Alexander Turnbull Library, Wellington, NZ.

cores and ground-penetrating radar measurements around the Ptolemaic temple, which was part of a recent groundwater-lowering project.²⁵

At Gebel es-Silsila, which lies about 64 km north of Aswan, the river cuts through a large sandstone formation famous for having been exploited as quarries, especially during the New Kingdom. The most prominent quarries lie on the east bank of the river – probably the place where the ancient settlement called Kheny would have been situated.²⁶ At this site there is also evidence for an artificial harbor basin that had been cut into the sandstone and was then used during the flood season to load quarried stone on ships. It measures 100 m by 50 m in size and has a depth of 8–10 m.²⁷

A further example of a natural rock formation having been used for settlement activity comes from the site of Gebelein, located about 28 km south of Luxor.²⁸ Two elongated limestone hills, oriented north to south, flank the river. The western one had been used as a necropolis, while the eastern one lies next to the river and was used

for settlement from at least as early as the Old Kingdom onward.

3.2.3 The Fayum depression

Another geographic zone that is part of the Nile Valley and that saw a concentration of settlement activity is the Fayum Oasis (Figure 5.1). This region is characterized by a large lake called Birket Qarun or Lake Moeris; it currently lies 42 m below sea level and has been linked directly to the Nile through the Hawara Channel. During the annual inundation, the water level was high enough to enter the Fayum depression, and through most of the Pharaonic period this link between the Nile and the lake remained active.²⁹ Nowadays, the lake has shrunk to a relatively small size, and the secondary Nile channel called the Bahr Yussef is a much smaller version of a Nile branch in comparison with its predecessors.³⁰ The Fayum region provides a unique environment, which in antiquity consisted of marshland and was rich with waterfowl. Its



3.6. Floodwaters surrounding houses in 1964. John Feeney Collection, Alexander Turnbull Library, Wellington, NZ.

agricultural potential was realized at least as early as the Middle Kingdom, when especially the Twelfth Dynasty started a major effort to cultivate and colonize the region.³¹ The fluctuation in the water level of the Birket Qarun is intimately linked to the fluctuations in the Nile flood and provides another source of data for climatic changes in prehistoric times and also for the Pharaonic period.³² The settlements were mainly situated along the margins of the lake, but nowadays some of these sites appear to lie completely in the desert zone – sometimes at a considerable distance from the lake, though this was not the case in antiquity. There is also some evidence that the lake stood quite high during the Middle Kingdom, at about 10 m above sea level (a.s.l.), which corroborates the records of higher flood levels of the Nile during this period.³³

3.2.4 The geomorphology of the Nile Delta

The geomorphology in the Nile Delta is characterized by a complex formation of Nile distributary branches, creating levees and natural basins similar to those in the Nile Valley, with an increased number of them forming

seasonal swamps.³⁴ In Pharaonic times there were probably up to seven branches, of which only two remain active in modern times – the Rosetta and Damietta branches – while the others have silted up.³⁵

Settlements in the Delta region were frequently founded on elevated sandy islands, called “turtlebacks” or *geziras*. These were formed by Pleistocene sands and often got covered over time by Holocene clays and silts.³⁶ The islands were created when some of the Pleistocene sand deposits withstood forces of erosion related to sea level changes. Another process that has been associated with the formation of turtlebacks is the redeposition of eroded sands by the river channel along its banks.³⁷ The Nile Delta does not contain any significant rock formations that could have been used for settlement or for the exploitation of stone as building materials. As a consequence, any stone for construction work depended on transport from the Nile Valley and frequently resulted in large-scale dismantling and reuse of stone from buildings at abandoned settlement sites. For example, the new Kingdom city of Pi-Ramesses at the modern town of Qantir in the eastern Delta was taken apart by kings

residing in Tanis who reused the stone elements of important temples.

Proximity to any of the Nile branches offered a major advantage for the foundations of towns and cities, and it is evident that all of the major tell sites with long-term settlement were situated in close proximity to these waterways. In this respect, the silting up of such a channel could have had a devastating consequence for the livelihood of a town. Certain shifts in settlement patterns and the complete abandonment of towns and cities were most often linked to changes in the river channels.³⁸ Furthermore, location along the major waterways provided the only access to the Mediterranean Sea, which is another consideration that influenced the foundation and long-term settlement of cities in the entire Delta region. The recent geophysical survey at Tell el-Dab'a (ancient Avaris) in the eastern part of the Delta revealed the existence of a large urban center from the late Middle Kingdom onward and provided new evidence for the presence of a large inland harbor site close to the town. It has been proposed that by the New Kingdom, this harbor had become the most important naval base, containing the royal fleet.³⁹ In the Ramesside period, the center of the city shifted further north, near the modern town of Qantir – the location of ancient Pi-Ramesses. Apart from offering optimal conditions for seafaring and being located along major trade routes toward the southern Levant, Tell el-Dab'a also had the advantage of being relatively well protected on its eastern side by an important drainage system. This system created large overflow lakes that formed swamps, which were difficult for any intruders to cross.⁴⁰

3.2.5 Environmental factors impacting settlement

Settlement in ancient Egypt was not restricted to the floodplain and Delta regions but also occurred on the flat desert along the margins of the valley. These sites were influenced in their layout and development by different factors in comparison with those in the areas prone to flooding. There is a tendency to think that the largest urban centers were always intimately connected to a major waterway, providing easy access to water as well as allowing for river traffic, but in most cases the overall size and potential for expansion remained restricted to the size of the underlying levee or *gezira*. Tell sites that had formed in a floodplain zone could only evolve within certain limits and often expanded only very slowly in a horizontal direction. For example, at the town of

Elephantine, which is situated on an island opposite the modern town of Aswan in the First Cataract region, the expansion of the habitable area was achieved by filling up a depression that had separated the eastern and western parts of the island.⁴¹ Similar filling in of the natural ground around a settlement can be made by the regular deposit of settlement waste, for example, and large-scale leveling activities. Apart from the restrictions on settlement expansion, the changes in the course of the river had other substantial impacts on the physical evolution of these sites.

Recent investigations concerning the migration of the river in the Memphite region have offered new insights into the shifting location of a major city, which considerably depended on the proximity to the river and its branches.⁴² Another important factor that affected settlement patterns in the Memphite region relates to a different location of the apex to the Nile Delta; it probably lay about 30 km further to the south during the Pharaonic period in comparison with modern times.⁴³ A large drill-core survey and geological investigations in this area conducted by Katy Lutley, Judith Bunbury, and David Jeffreys, with further support by Mark Lehner, have led to a better understanding of the shifting waterways that impacted the region.⁴⁴ A more southerly lying Delta head would have also resulted in more Nile channels being present in the Memphite region than are present today. For example, there is evidence for such a distributary of the Nile running close to the western desert edge that would have been a major advantage for the construction of the Fourth Dynasty pyramids at Giza. Shifting river channels in the region had a strong impact on the location of settlements in general but might also be one of the factors that relate to the possible changes in the location of the royal residence.⁴⁵ In addition, a migrating river and its distributaries would have led to the gradual destruction of any settlement that stood in its way on the eroding side. This is an important point to consider when attempting to locate archaeological sites in Egypt today, and a number of sites have certainly been lost due to the moving river.

Settlement along the marginal regions of the floodplain, such as along the flat desert edge, had clearly the advantage of having been much less affected by river movement and the annual inundation. However, such a location had the disadvantage of being at a greater distance, and therefore more isolated, from the main artery of the country unless the Nile was flowing close to the desert edge, which is the case, for example, in the region

of Tell el-Amarna. Although water supply could be achieved through wells and smaller irrigation channels, access to the river for traveling up and down the country was more difficult for towns and cities situated along the edge of the floodplain. In some rare cases it seems that a settlement could be close to the river while being founded on the flat desert surface next to the floodplain – the New Kingdom city of Tell el-Amarna in Middle Egypt is a good example. Whoever was in charge of the town planning and the choice of location for this royal capital clearly realized the exceptional potential of the region. The large desert bay provided numerous advantages, such as being enclosed to the eastern side by a high cliff formation, while the northern end of the desert zone was very close to the river, allowing for easy access. It is not a coincidence that a major administrative building complex, the “Northern Administrative Building,” was erected exactly here, and it is very likely that it was linked via a quay to the Nile.⁴⁶ Because the river runs close to the eastern desert edge, it leaves a vast floodplain on the western side, which was assigned as the hinterland of this city, as can be learned from the inscriptions on the boundary stelae.⁴⁷ Thus, the newly founded capital at el-Amarna had the advantage of a wide plain at the planners’ disposal for laying out a large city and was not restricted in its settlement space by the same conditions as settlements in the floodplain.

Another major townsite, which will be discussed in depth in [Chapter 8](#), is the Middle Kingdom foundation at Lahun, close to the entrance to the Fayum. This settlement, which is one of the best-known examples of a state-planned settlement dating to the Middle Kingdom, was also founded on the desert edge ([Figure 8.19](#)). Little is known about its access to the nearby agricultural land and how the necessary water supply was obtained for the inhabitants, as the Nile did not flow anywhere near this town. It is quite likely that a Nile channel passed close to the western desert edge; the Bahr Yussef that feeds the Fayum depression lies today at a distance of 2 km. Although there is no direct evidence for the Bahr Yussef before 1870, there is evidence for an older Nile branch that would have followed a westerly course along the desert edge, feeding the Birket Qarun lake.⁴⁸

A major water channel along the western side of the Nile Valley in ancient times would also make much sense in relation to the foundation of Itj-Tawy, the royal residence of the Twelfth Dynasty rulers. Its precise location has only been tentatively identified with regard to the two pyramids of Amenemhat I and Senwosret I,

including a major cemetery opposite the modern village of El-Lisht.⁴⁹

The well-known settlement of Abydos, situated within the eighth nome of Upper Egypt at about 90 km north-east of modern Luxor, is a further example of a large city developing along the margins of the floodplain. It evolved into an important ceremonial city linked to the cult of Osiris, the god of the afterlife, and was inhabited for most of the Pharaonic period.⁵⁰ The region of Abydos has been settled from the Predynastic Period onward, and results of a large survey in this region have shown the typical shift from loosely dispersed settlements along the flat desert zone near the floodplain to a more compact settlement by the beginning of the third millennium BCE.⁵¹ Even today a widespread scatter of villages occupies this zone between the desert and the floodplain. In the background of the flat desert zone rise the steep cliffs of the Western Desert, providing an impressive setting that seems to have added to the popularity of this region also as the foundation of large cemeteries from the Predynastic Period onward.⁵² The Nile currently runs at a distance of 9.5 km from the ancient townsite. There seems to have been an ancient channel that once was closer to the western desert edge.⁵³ The ancient city of Abydos had functioned as a ceremonial city for a long period of time and had flourished in this particular region, forming a tell site similar to those in the floodplain but less endangered by the inundation. It is noteworthy, however, that it never attained the role of regional capital of the eighth Upper Egyptian nome, which had always been that of Thinis, a town situated about 20 km to the north of Abydos. Its economic function in comparison with its religious status might have been of less importance, which nevertheless did not hinder Abydos’ urban development. Apart from the city of Abydos proper – nowadays called Kôm es-Sultan – further settlement and temple buildings, including royal mortuary complexes and cemeteries, stretch for more than 10 km to the south.⁵⁴

Thus, these few examples are good cases for towns and cities being situated along the margins of the floodplain, and it is evident that such settlement sites belong to a variety of categories, including new foundations by the state, such as Lahun and Amarna, as well as towns such as Abydos that are characterized by a more “organic” development. The desert edge has regularly been overlooked in its role of providing an advantageous location for settlement; this situation was affected by parameters different from those of sites that lay in the floodplain. Apart from being less prone to flooding, there was also less

restriction with regard to space and settlement expansion. In terms of economic roles, such settlements were in proximity to the agricultural fields and often close to desert routes leading toward the western oasis or the Red Sea coast. Abydos, for example, was connected via the Farshût Road to the West Bank at Thebes.⁵⁵

In contrast, towns and cities in the floodplain were better connected to the main means of transportation, the Nile River, which also facilitated contact between more-distant regions and the national capital. It is probably due to this fact that all provincial capitals had easy river access and were situated within the floodplain or the Delta. Other regions that played a role in the development of long-term settlement are the western oases: Siwa, Farafra, Kharga, and Dakhla. These oases form important depressions in the Western Desert and are supplied by natural springs and trapped underground water. They were also used as stopping points for Pharaonic expeditions into the Western Desert and have been linked to several major caravan routes such as the Darb el-Arbain. From at least the Old Kingdom onward, the oasis of Dakhla saw much interest by the Pharaonic state, which implanted a small community at Balat/Ayn Asil and another settlement at Ayn el-Gazzareen.⁵⁶

3.3 SETTLEMENT ARCHAEOLOGY IN EGYPT: PROBLEMS AND PRIORITIES

The specific environmental conditions in Egypt as well as the fast rate at which the modern population has been growing over the past decades have serious consequences for the preservation of ancient settlement remains today and have heavily contributed to the unevenly distributed data we have from the Prehistoric and Dynastic periods. The three main factors that play a role for settlement archaeology in Egypt in general but also for any strategies concerning future site protection and management can be summarized as follows:

1. The effects of *sebakh* digging, which have led to the loss of more than 50 percent of ancient tell sites in Egypt
2. Thick alluvial and aeolian deposits covering archaeological remains, making any large-scale excavation difficult
3. Modern agricultural practices and fast-growing towns and villages, which cause serious damage to sites, including their gradual disappearance

3.3.1 The effects of *sebakh* digging

One of the most serious threats to the preservation of ancient settlement sites has been the digging for agricultural fertilizer, commonly called *sebakh*. From about 1830 onward, local communities in rural Egypt started to use this nitrogen-rich soil from abandoned settlement sites as fertilizer for their fields.⁵⁷ As outlined previously, the main building material that can be found at ancient – but also at much more contemporary – settlements are sundried mud bricks made by using alluvial and marl clays with added temper depending on the available clay sources. By 1985, the use of mud brick for domestic architecture had been officially prohibited when it became evident that the increasing demand for mud bricks used in construction work due to the fast-growing population in Egypt would lead to a depletion of the alluvium that was no longer renewed by the annual flood cycle.⁵⁸ Mud-brick constructions are not only well adapted to the climate in Egypt, but it was also relatively easy to produce this building material in large quantities using locally available clays.⁵⁹

As a consequence, tell sites contain large amounts of mud-brick walls but also settlement debris and decomposed waste, including animal dung, all of which make especially nitrogen-rich soil that is ideal for agriculture. While today artificial fertilizers can be used, one hundred years ago *sebakh* was a cheap and easy way to enrich fields. Therefore, abandoned tell sites provided a good source for such materials, and this situation led to an increase in the exploitation of these ancient settlement sites as quarries for *sebakh*.

As early as 1893, the destruction of antique sites was recognized, but little was done to stop it. For example, in 1901 Georges Foucart published a lengthy report about the quick disappearance of tell sites in the Delta due to *sebakh* digging.⁶⁰ He described the presence of a larger number of tell sites in this region, some of which were still settled by modern villages and towns, others used as cemetery sites, and many simply abandoned, often due to changes in the land- and waterscapes. In his report, Foucart drew attention to the fact that it was those abandoned mounds that were rapidly disappearing because of *sebakh* digging. Especially smaller tell sites were threatened – and they often completely vanished – while larger ones were exploited over several years.⁶¹ However, illicit digging for antiquities was much less common in this region. The extraction of *sebakh* developed into a large industry where railway lines were installed at some larger sites – such as the

Ptolemaic town of Karanis in the Fayum – leading to an industrial scale of sebakh extraction and the rapid as well as thorough destruction of the ancient remains. Archaeologists working at Karanis at the time were in constant competition with the sebbakhin to excavate these areas, before the latter were able to reach intact archaeological remains.⁶² In addition to its use as fertilizer, sebakh was also used for the production of saltpeter (potassium nitrate) and fired bricks. In some places large industrial facilities existed close to important tell sites.⁶³ For a long time, the Antiquities Service in Egypt was unable to stop sebakh activity, even though the Ministry of Public Works issued a decree in 1910 that prohibited any sebakh digging without permission from the Antiquities Service. The decree was not very effective, and the Antiquities Service struggled to implement it.⁶⁴ Sebakh digging on an industrial scale was finally stopped in the 1930s, but this did not effectively end the extraction of sebakh on a smaller scale by local communities, especially in more remote areas of the country.⁶⁵ By that time a considerable loss and destruction of many tell sites in Egypt had already occurred, and today there is almost no tell that has not been at least partially affected by this phenomenon. Sebakh digging seems to be an issue particularly severe in Egypt, where the intensified practice of certain agricultural methods, the presence of specific environmental conditions, and a growing population has had serious consequences for the preservation of ancient sites. For example, ancient tell settlements situated in modern Iraq are to a much lesser extent affected by the reuse of mud bricks and soil, and there has never been the development of an industry for the extraction of these materials.⁶⁶

However, sebakh digging not only affected the survival of ancient settlements and added a certain amount of distortion to any attempt toward evaluating settlement hierarchies and wider systems in the Delta and Nile Valley – a large number of smaller tell sites were lost completely. It also had another secondary effect that concerns the distribution of pottery in the fields and poses a problem for survey work. While the sebbakhin were quite keen to sift out pottery and stones from the soil and bricks they quarried, a certain amount of residual sherds remained and were probably even left deliberately in order to lighten the soil.⁶⁷ Such sherd scatter as a kind of “background noise” has also been noted in fields around tell sites in Iraq, where it is possible to distinguish between fragments of pottery left by modern activities making use of antique settlement soil as fertilizer and the ancient practice of taking manure and settlement waste to the fields.⁶⁸

The actual process of sebakh digging can be seen quite well at the ancient settlement of Tell Edfu in Upper Egypt, for example, where more than 50 percent of the ancient mound has been lost. Photographs taken by the French mission that held the concession of the site in the 1920s and 1930s show some details about the way the sebbakhin conducted their work. They used the sides of the tell as a quarry and cut it down almost vertically, using manual labor. Donkeys and camels were readily available to take away the soil and bricks, whereas pottery sherds were left in large heaps on the ground. These heaps of sherds were often reused for modern construction material, such as the foundation fill for the tracks of the railroad.⁶⁹ At Edfu there is even evidence that pottery was used to fill trenches dug around the Ptolemaic temple, which was excavated in order to check and consolidate the ancient foundations.⁷⁰

Thus, as far as the settlement system of tell sites in ancient Egypt is concerned, the extraction of sebakh had a devastating effect on the preservation of antique settlements and led to the complete disappearance of many smaller tells, probably mostly those that were ancient villages inhabited over long periods of time. This clearly has some consequences for any attempts to establish the hierarchies of settlements and provide a rank list of different settlement categories including villages, towns, and cities.

3.3.2 Alluvial and aeolian deposits covering ancient settlements

The exploration and excavation of ancient settlements is also dependent on the thickness of the alluvial deposits that can cover these ancient remains. This aspect is relevant to survey work and also excavations, because only limited amounts of data can be obtained through drill cores when archaeological fieldwork is not a feasible option.

The rates of alluvial deposits in the Nile Valley have been calculated on the basis of suspended matter contained in the floodwaters. Such research was only possible at a time when the Nile flood was still actively happening. In 1939, John Ball calculated the rate of alluvial deposits in the floodplain, which were estimated to grow around an average of 1.03 mm per year.⁷¹ This means that for a period of 1,000 years the average thickness of deposited silt in the floodplain would have reached 1.03 m. In addition, a certain variation in the thickness of deposition has been observed for historical times at the Nilometer of Roda in Cairo,

where for example only 8 cm of silt accumulated between 641 CE and 1330 CE in contrast to 65 cm between 1330 CE and 1630 CE.⁷² The different rates of deposition are closely linked to the changes in the sea level, but these measurements clearly show that some variation has to be factored in. This observation is also valid for differences between the Nile Valley and the Delta region, though there is no independent study for alluvial deposits in the Delta. Another factor that influenced the alluvial deposition rate is the kind of irrigation system in place. There is evidence that basin irrigation, what the ancient Egyptians practiced, allows for a higher deposition rate than, for example, perennial irrigation, practiced in the Delta during the late nineteenth/early twentieth century.⁷³ Up to the present time, mainly studies of Predynastic settlement patterns have led to investigations of alluvial deposits covering ancient settlement remains through the use of drill cores, whereas there is no equivalent study for the Pharaonic period. For example, at the site of Minshat Abu Omar in the northeastern Nile Delta, attempts have been made to reconstruct the paleogeographical development, including human occupation, during the Predynastic and Early Dynastic Periods.⁷⁴ Numerous drill cores were sunk into the ground that could reach a depth of up to 16 m below the modern surface. Predynastic remains were found at a depth of about 6 m below the current surface and provide good evidence that the region of Minshat Abu Omar had been settled at least since the fourth millennium BCE by the Buto-Maadi culture.⁷⁵ However, evidence for earlier remains has not been found so far, and it is possible that during the fifth millennium BCE settlement was spread out much wider in this region, which was less affected by inundation at that time. As the authors emphasize, the discovery of such remains of human activity today can often only happen by chance, because these remains are buried too deeply beneath the surface.⁷⁶

Tell sites that developed in the Delta and the Nile Valley from about 3000 BCE onward and were places of long-term settlement, forming major towns and cities, can be much more easily detected – even if they lie under modern settlement – than those sites that saw a much shorter occupation. This is certainly one of the causes for a considerable lack of archaeological evidence for those smaller rural types of settlements belonging to the category of villages, hamlets, and estates, which were ubiquitous in the Delta and Nile Valley, as is known from

textual records.⁷⁷ From an archaeological perspective, this category of settlement is almost completely absent, a situation that provides a rather distorted view of settlement patterns in Predynastic and Dynastic Egypt.

Apart from alluvial deposits covering ancient settlement remains, there are also cases where aeolian sediments accumulated in larger quantities than normal above sites. A good example of such a case has been discovered close to the valley temple of the Red Pyramid at Dahshur. Recent fieldwork investigating the location of the pyramid town linked to the royal funerary complex of the Red Pyramid at Dahshur (Fourth Dynasty, reign of Snofru) – in existence from the Fourth to Sixth Dynasties – provided new evidence for thick sediment accumulations in the zone along the western desert edge.⁷⁸ The approximate location of the Valley temple of Snofru's pyramid complex has been known due to the discovery of a royal decree in 1904 close to the desert escarpment.⁷⁹ A more recent survey used drill cores to locate possible traces of Old Kingdom settlement. Analysis of the cores showed remains of mud-brick walls and pottery in two distinct phases below the surface, which were in some areas separated by a thick accumulation of sterile desert sand.⁸⁰ Settlement remains of the Old Kingdom were found at about 5 m below the topsoil and are separated from the later Middle Kingdom layers by a sand accumulation of about 1.5 m. These results indicate that there had been some dune movement toward the Nile Valley during the First Intermediate Period. Similar sand accumulations have been noted at the Giza settlements⁸¹ and even as far as the Red Sea coast,⁸² which might be a sign of a more global phenomenon.

These results also imply that any attempt to excavate in this area would be a difficult and very costly operation, because in addition to the sand accumulation, the archaeological site also lies partly beneath modern roads and settlement.

3.3.3 Population growth and other factors endangering archaeological sites in Egypt

The third major factor affecting current settlement archaeology in Egypt regards population. The vast growth that makes Egypt one of the fastest-growing populations in the world has greatly impacted modern land use in the floodplain and Delta and also along the desert margins, which are all zones that also contain ancient settlement remains as outlined in previous

discussion. While it has always been the case that a certain number of modern towns and villages lie on top of ancient tell sites – which, for example, can be clearly seen on satellite images of the modern town of Edfu in Upper Egypt, where the extent of the tell is easily discernable from the elevation and modern street patterns (see Figure 7.9) – the constant population expansion that can be witnessed is increasingly threatening sites that have until recently been relatively well protected. In Cairo, the important ancient city of Heliopolis and the Predynastic settlement site at Maadi have been much affected by the encroachment of modern urban settlement over the past years.⁸³ Thanks to the good coverage of satellite imagery, it is now possible to monitor these threats and developments quite well.⁸⁴ One of the aims for future site protection is not only the monitoring of settlement development near ancient sites but also the creation of an awareness among the local population for the protection of their cultural heritage.

Fieldwork in Egypt today has only over the past ten years become involved in rescue excavations, which are increasingly an issue in densely settled urban environments with much construction work. Up to now there have been no regulations or laws in Egypt in any manner comparable to those in Europe or North America, where teams of regional archaeologists are being employed mainly for rescue fieldwork. Nevertheless, first steps have already been taken to more firmly establish rescue archaeology in Egypt. This progress can be witnessed, for example, in connection with the recent fieldwork project carried out by the Swiss Institute in collaboration with the local Egyptian inspectorate at Aswan.⁸⁵ The central part of the fast-expanding modern town of Aswan lies above the Ptolemaic and Roman settlement of ancient Syene, and therefore any modern construction work in this part of the town will uncover archaeological remains below the surface. In Cairo, an important rescue project has also been carried out by the French Institute (IFAO), which focuses on the Fatimid and Ayyubid town walls located at the Al-Azhar Park.⁸⁶ The medieval remains of Cairo have been much threatened by the expanding modern urban settlement, and hopefully more such fieldwork will be conducted in the future to preserve the rich national heritage in Egypt.

Since 2002, the Ministry of State for Antiquities (MSA) enforces a new rule that prohibits any new concessions for excavations in Upper Egypt. The aim is to concentrate research and fieldwork in the Nile Delta, where sites are particularly threatened, but also in the Eastern and

Western Deserts, which have been much less explored than many regions of the Nile Valley.⁸⁷ Over the past ten years, this rule has certainly led to an increased focus on settlement sites in these regions. New projects that have started in different parts of the Nile Delta have provided new data and insights about a region that has received in many ways less attention than southern Egypt. A relatively new project, the Minufiyeh Archaeological Survey, directed by Joanne Rowland, focuses on the investigation and recording of archaeological remains in the Minufiyeh Governorate, situated in the central part of the Nile Delta.⁸⁸ New fieldwork has also started at Tell Basta, the ancient city of Bubastis, which had been the capital of the eighteenth Lower Egyptian province. A joint mission of the University of Göttingen and the Egypt Exploration Society directed by Eva Lange has been exploring the temple area and seeks to investigate the urban layout of this city.⁸⁹ Equally important is new fieldwork focusing on the Predynastic cemetery discovered at the site of Kôm el-Khilgan in the eastern Delta.⁹⁰ The main objective of this project focuses on the development of the Predynastic community within the context of the surrounding environment. The fieldwork on site incorporates geomorphological and geological techniques in order to establish the broader framework of the Predynastic occupation. So far, mainly cemetery remains have been excavated, while any traces of the corresponding settlement are still missing. In the western Delta, a survey project conducted by Joshua Trampier focused on the problems and priorities of archaeological fieldwork in this region, drawing specific attention to the potential of regional studies and the definition of archaeological sites, including the wider implication for cultural heritage management.⁹¹

These examples are just a small selection of numerous new projects that have been established over the past ten years, and they should be considered a major step forward in the exploration of the much-endangered Delta zone. Closely related to such concerns, the former Supreme Council of Antiquities founded an initiative entitled “Egyptian Antiquities Information System” (EAIS) in 2000, which has collected data from archaeological sites all over the country with the aim of improving their documentation and protection as well as creating a database that can be used for monitoring land use and developing site management strategies. This project is an important initiative from the Egyptian side and hopefully will be further pursued in the future.

As outlined previously, the peculiar environment in Egypt has impacted not only the formation and foundation

of towns and cities but has also affected their preservation. Any research dealing with the ancient settlement system has to take those issues and parameters into account. The increasing threat of modern population growth is a serious concern that needs to be addressed, and it is evident that in the future a close collaboration between the Ministry of State for Antiquities and foreign missions will be necessary to develop new strategies for site protection and management.

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The Origins of Urban Society

4.1 INTRODUCTION

During the formative stage of ancient Egyptian culture, towns gradually emerged that already showed some of the characteristics of urban society, which became standard during the later Pharaonic period and continue to evolve over several millennia. The archaeological evidence from various sites located in different regions of Egypt, from the southern border town of Elephantine in Upper Egypt to the settlement at Buto in the northwestern Delta, shows remarkable indications for the beginnings of urban society (Figure 4.1). This is also the time frame during which the early Egyptian state was formed.

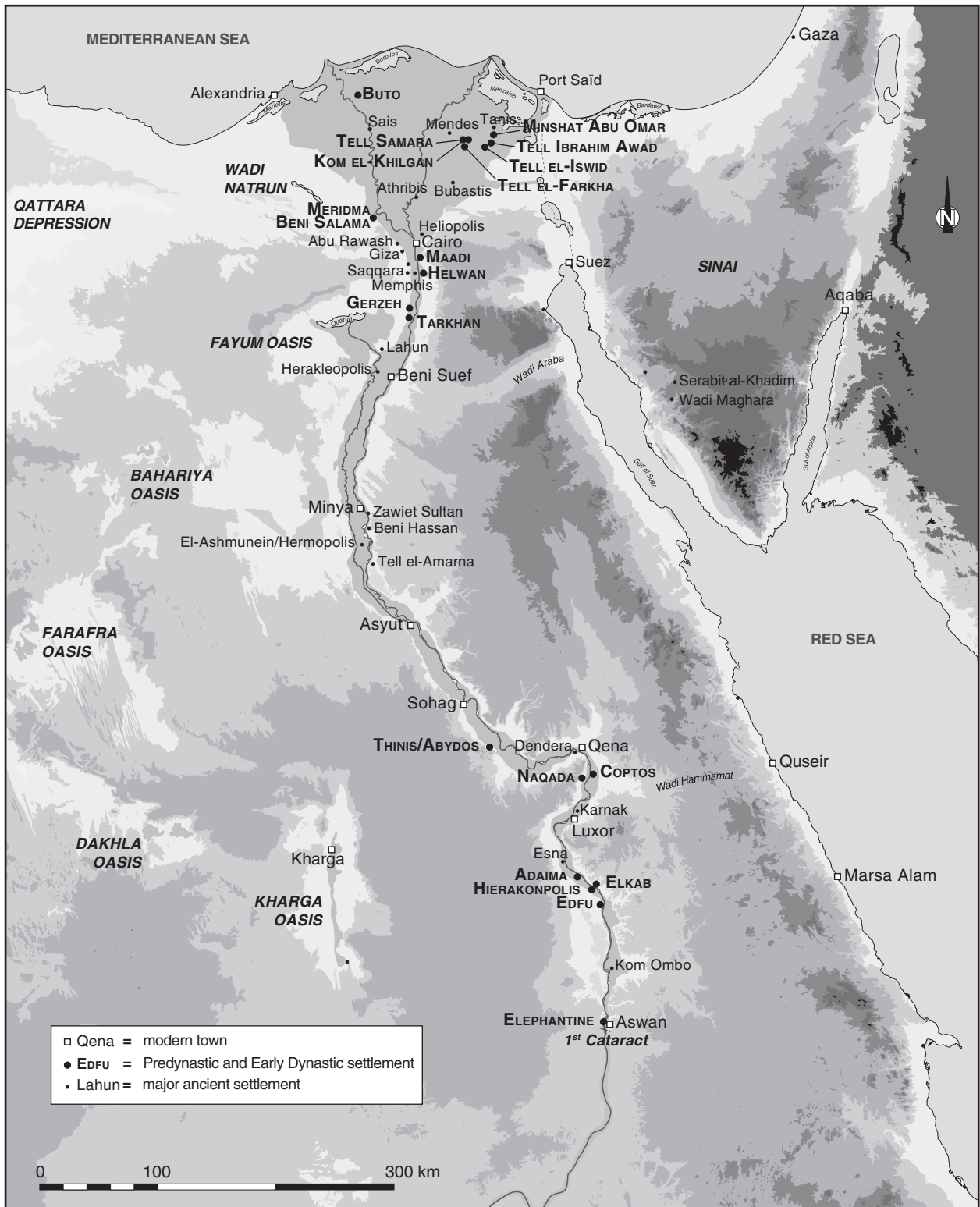
The archaeological evidence from these settlement sites is quite incomplete, and in most cases only small areas and exposures of a few structures have been excavated. However, it is possible to get some insight into the earliest development of the larger towns as well as a glimpse concerning their layouts, which also allows for a first evaluation of the characteristics of these earliest Egyptian settlements. The study of Predynastic and Early Dynastic Egypt has received increased scholarly attention since the 1970s, but in comparison with the archaeological evidence from the Pharaonic period, there is still much less data available. This is to some extent related to the preservation of the archaeological evidence, much of it having been affected by high groundwater levels as well as covered by thick layers of alluvium or later settlement. A noticeable surge over the past ten years in excavations focusing on the earliest phases of ancient Egyptian civilization can be noted for the Nile Delta region, where a number of new sites have been excavated – such as Tell el-Farkha and Tell Ibrahim Awad, but also Tell Iswid (Figure 4.1).¹ Much of this work is still in progress. Given the incomplete nature of the preserved evidence from settlements, only a tentative

evaluation of these sites can be given here; nevertheless, the evidence gathered is a start with which new archaeological results can be integrated in the future. The following analysis has the aim of bringing together several key aspects such as the emergence of mud-brick architecture, the appearance of buildings of official character, early sanctuaries, and trends in the more general development of early towns – for which Hierakonpolis is the prime example because it has been excavated and surveyed in much detail (Figure 4.1). By analyzing the excavated settlement remains, even if they only present a small portion of the whole settlement, it is possible to obtain an initial picture of what characterized and constituted these earliest towns and their inhabitants. This picture, in turn, provides a first opportunity to trace the beginnings of urban society in ancient Egypt.

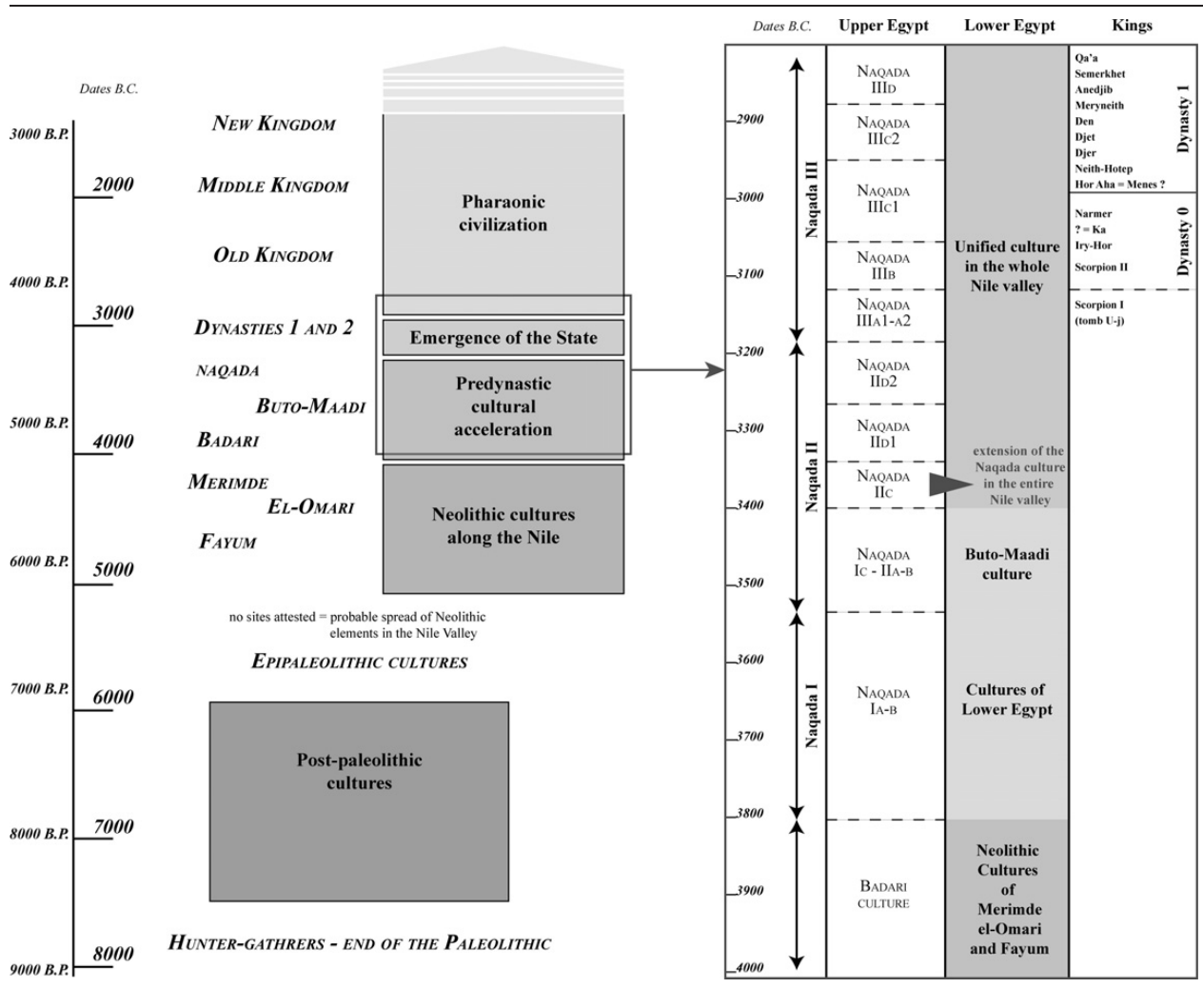
4.2 THE FIRST APPEARANCE OF URBAN ELEMENTS

The formative period for the ancient Egyptian civilization, culminating in the inception of a politically unified territorial state around 3100 BCE and the following Early Dynastic Period, set in motion many of the traditions that later became so typical for the Pharaonic period. The emergence of complex settlement systems showing the first urban characteristics gradually appeared in the Nile Valley as well as the Delta region during the late Naqada II period (Naqada IIC–D, Table 4.1). It also indicates that, in the case of Egypt, a unified state was not a prerequisite for the emergence of urbanism.²

Even though our archaeological record is far from being complete, a number of urban elements can already be recognized at the end of the Naqada II period that will gradually become the dominant features of ancient



4.1. Map of Predynastic and Early Dynastic sites in Egypt. By G. Marouard.

TABLE 4.1. Chronology of Predynastic and Early Dynastic Egypt

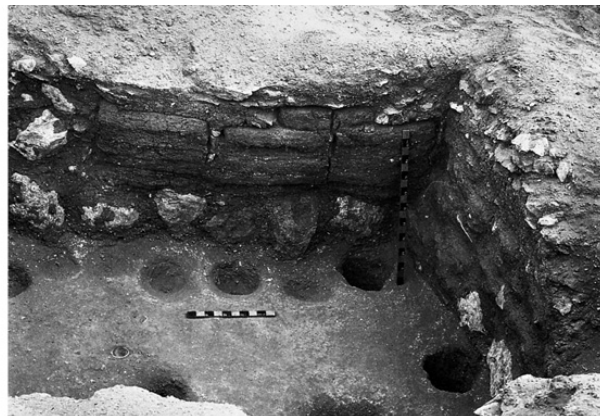
By G. Marouard, after B. Midant-Reynes, *Aux Origines de l'Égypte. Du Néolithique à l'émergence de l'État*, Paris 2003, tab. 1 and 2.

Egyptian towns during the Early Dynastic Period. The latter is characterized by the appearance of local sanctuaries and temples, designated production and manufacturing areas along the settlement margins, hierarchies among buildings according to size and layout, and “palatial” complexes that functioned as the residence of the local chief but also seem to have held an important economic/administrative and even cultic function. There is, in addition, evidence for fortified enclosure walls during this formative stage of ancient Egyptian history.³ At the same time, elaborate cemeteries showing increasing social differentiation appeared in the vicinity of the settlements.

The choice of sites that will be discussed in depth in this chapter is mainly based on the availability of detailed

archaeological data. With the exception of the case of Hierakonpolis, the archaeological evidence presented here dates to the late Predynastic and the Early Dynastic Periods.⁴ Hierakonpolis deserves a fuller treatment because of its continuous occupation from the early Predynastic Period to the late Old Kingdom, and in this respect it has much to offer in terms of a wider analysis of settlement patterns and the general evolution during these earliest phases of Pharaonic civilization.

Certain elements that are a prerequisite for urban development started to appear during the transition from the latter part of the Predynastic into the Early Dynastic Period. From the late Naqada II period onward (ca. 3400 BCE, see Table 4.1), it is possible to observe a gradual trend



4.2. Semisubterranean house at Maadi and detail of the mud-brick wall (Buto-Maadi culture). After I. Rizkana J. Seeher, *Maadi III. The Non-Lithic Small Finds and the Structural Remains of the Predynastic Settlement*, AV 80, 1989, pl. XV 1, 2. © Deutsches Archäologisches Institut, Kairo.

toward more-nucleated settlement with higher population densities, increasing craft specialization, and the existence of a network engaged in long-distance trade.⁵ Certain traits, such as the appearance of specific production areas, for example larger breweries, which are possibly also linked to the first emergence of the division of labor, appear already in the earlier Naqada II period.⁶ During the same time, growing social complexity is witnessed, especially by the appearance of elite cemeteries displaying variations in rank, but this remains less visible in the settlements where no real differences can be seen in terms of size or layout of individual structures. An early example of a kind of monumental building of ceremonial nature has been found at Hierakonpolis, at Locality 29A, which dates to late Naqada II/early Naqada III, but no real large-scale mud-brick or stone architecture seems to have existed here until the Early Dynastic Period.⁷

It is the time frame between the emergence of a unified territorial state and a certain level of cultural unity for all of Egypt – starting around the Naqada IIIA2 period (= Dynasty 0, see Table 4.1) and evolving rapidly during the Early Dynastic Period – that appears to be the most formative period for the development of ancient Egyptian towns and cities. Among those elements and features that first become visible in the archaeological record during this time period (Dynasty 0/Naqada IIIA–B) are:

1. Rectangular buildings made entirely of mud brick
2. Specific manufacturing and production areas along the settlement margins
3. Ceremonial centers and early temples/shrines

4. Appearance of buildings of administrative/official character as well as “palatial” structures
5. Large enclosure walls with various functions demarcating large building complexes of official, palatial, and ceremonial nature as well as serving as fortifications

4.2.1 The appearance of mud-brick architecture

The predominant building material employed in settlements was sun-dried mud brick,⁸ the use of which appears during the earlier culture of Buto-Maadi (ca. 3600 BCE; see Table 4.1) in the Delta, where mud brick is attested for the foundations of semisubterranean houses together with a stone and mortar construction (Figures 4.2 and 4.3).⁹ These earliest traces of the use of mud brick as a building material for domestic architecture appear in a settlement area where seemingly “foreign” types of houses have been uncovered – notably several subterranean constructions that resemble buildings from the Beersheva culture in the southern Levant (Figures 4.4a and b).¹⁰ There is a good chance that the technique of mud-brick construction has Levantine origins, which would also fit with the earlier appearance in northern Egypt, before its use is attested in the south.¹¹ At the Upper Egyptian site of Hierakonpolis, the sporadic use of mud brick in combination with stones set in mud mortar and upper walls made with the wattle-and-daub technique¹² date to the early Naqada II period, about 100 years later than its first appearance at Maadi (ca. 3500 BCE; see Table 4.1). The use of mud brick is also attested for tomb architecture in the same time period.¹³



4.3. Semisubterranean house with stone wall at Maadi (Buto-Maadi culture). After U. Hartung, “Puzzlearbeit zwischen Neubauten: Neue archäologische Untersuchungen in Maadi,” in G. Dreyer, D. Polz (eds.), *Begegnung mit der Vergangenheit – 100 Jahre in Ägypten*, 2007, 127, Abb. 173. © Deutsches Archäologisches Institut, Kairo.

Although it is possible to observe that the beginnings of adobe architecture in Egypt are strongly linked to domestic buildings, its usage is also known to have been quickly adopted for the construction of funerary architecture.¹⁴ This observation indicates an increasing preference for mud brick as a building material, which had the advantage of relatively cost-effective and quick production as well as being adapted to the hot climate. Its adoption for tomb architecture was probably motivated by similar considerations but also suggests that tombs might have been to some extent modeled on houses and already conceptualized as “house of the dead” during the Predynastic period. By the Early Dynastic Period, mud brick was established as the principal building material in settlements and also widely employed for funerary architecture – in some cases even on a monumental scale, as can be witnessed by the royal tombs and funerary enclosures at Abydos as well as the elaborate elite tombs at Saqqara.¹⁵

The long-term focus on funerary architecture has led to a considerable bias in the archaeological data in relation to what is available for the earliest settlements – a situation similar to what is seen for the later Pharaonic period. This makes any intersite comparison difficult, and one is often confronted with seemingly unique buildings that do not have any comparisons elsewhere, such as the “palace façade” structure at Hierakonpolis or the large building complex of the Early Dynastic Period excavated at Buto (Figures 4.26 and 4.32). The latter had been first



4.4a. Subterranean building at Maadi (Buto-Maadi culture). After U. Hartung, “Puzzlearbeit zwischen Neubauten: Neue archäologische Untersuchungen in Maadi,” in G. Dreyer, D. Polz (eds.), *Begegnung mit der Vergangenheit – 100 Jahre in Ägypten*, 2007, 128, Abb. 175. © Deutsches Archäologisches Institut, Kairo.

interpreted as a funerary or cult complex because of the organization of doorways according to the bent-axis principle that also occurs in mortuary architecture. This view was later corrected.¹⁶

In the past, scholars frequently attempted to draw comparisons between domestic and funerary architecture because little else was available. It is important to realize that the origins of many architectural forms and traditions in Egypt have their roots in the settlement context, even though this context is often less well known in comparison with funerary and cult architecture. It is evident that certain forms and styles were quickly adopted in the latter and then developed further into their own tradition.¹⁷ For example, the layout of the large mud-brick tomb U-j at the early cemetery at Abydos (belonging to a late



4.4b. Entrance to the subterranean building at Maadi. After U. Hartung, “Puzzlearbeit zwischen Neubauten: Neue archäologische Untersuchungen in Maadi,” in G. Dreyer, D. Polz (eds.), *Begegnung mit der Vergangenheit – 100 Jahre in Ägypten*, 2007, 128, Abb. 175. © Deutsches Archäologisches Institut, Kairo.

Predynastic ruler) has been interpreted as a model of a palatial building that was transposed into the funerary sphere.¹⁸ However, it is necessary to exercise caution when comparing buildings from settlement contexts directly with funerary architecture, because both spheres clearly developed according to their own trajectories.

4.2.2 Evidence for domestic buildings of rectangular layout

The current archaeological evidence shows the presence of buildings with rectangular walls made entirely of mud brick from the Naqada IIC/D1 period onward.¹⁹ They appear first quite sporadically in the north and south, and do not replace the previously existing building techniques such as wattle-and-daub and wooden constructions.

In the Delta, sites such as Buto/Tell el-Far’ain, Tell el-Farkha, and Tell Ibrahim Awad (Figure 4.1) provide some evidence for complete buildings that show more than just the occasional mud-brick wall fragment. Mud-brick construction seems to appear increasingly in the archaeological record from the end of Naqada IID to early Naqada IIIA onward. The gradual introduction of mud bricks at Buto as the principal building material starts during the transitional settlement phase of IIIa–f, which is also equated with the beginning of the dominance of the Upper Egyptian Naqada culture at the settlement.²⁰ The first full outline of a rectangular mud-brick building is visible in Phase IIId, which dates to the Naqada IIIA

period at about 3200 BCE (see Table 4.1). At least four rooms can be distinguished, the largest one being 2.8 m wide and 7.6 m long (Figure 4.5).²¹ The associated finds are not providing any indications as to the use of this building – for example, whether it was domestic or official in character.

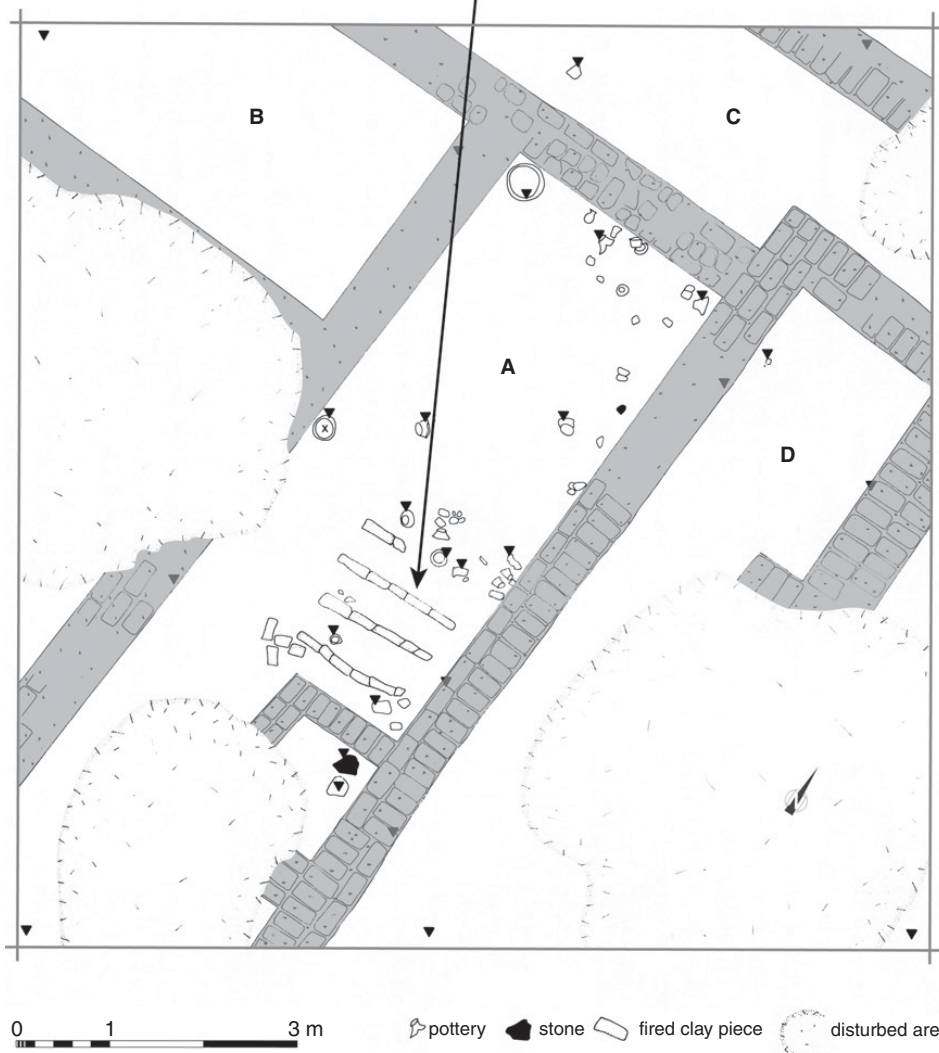
At the site of Tell el-Farkha in the eastern Delta, fully identifiable mud-brick houses appeared about the same time as in Buto, with comparable dimensions (Figure 4.6).²² Excavations in the southern part of the Central Kôm revealed elongated mud-brick rooms built around an open courtyard (Figure 4.7). The rooms measure 3.5 m in width and are about 10 m long. They have been dated to the Naqada III period.²³ These settlement remains have been interpreted as a service complex according to the presence of kilns, hearths, and numerous storage installations such as grain silos. Evidence for administrative activity comes from the discovery of a cylinder seal.²⁴ The same phenomenon has also been noticed at Tell Ibrahim Awad, where entire mud-brick structures are present from stratum 6 onward.²⁵

In the south, the evidence is less clear, which is partly due to less settlement sites having been excavated. The evidence from the Naqada-period settlement remains at the island of Elephantine, situated in the First Cataract region, shows the first appearance of mud-brick buildings during Naqada IIIC1, thus slightly later than in the Delta but of comparable dimensions and layout.²⁶ The walls of this rectangular house are relatively thin, only one mud brick thick; and to its southern side, several postholes indicate the presence of a yard-like area demarcated by a wooden fence (Figure 4.8).²⁷ This is also from the time when the first mud-brick wall was erected in front of the natural niche between the basalt boulders, which functioned as an early shrine and later developed into the temple dedicated to the local goddess Satet.

At the site of Hierakonpolis, ancient Nekhen, the evidence for the appearance of mud-brick buildings is less known. Although broken bricks were already used for the foundation of the house excavated in Locality HK 29 (Figure 4.22), dating to the beginning of the Naqada II period, complete rectangular house structures made entirely of mud brick from before the Early Dynastic Period have not been excavated. This is mainly related to the problem of high groundwater level at the site of ancient Nekhen, situated in the floodplain, which made it impossible for the excavators to carry out a larger-scale excavation. Michael Hoffman dug a 10 m × 10 m square (10N5 W; see Figure 4.25) at the settlement mound of



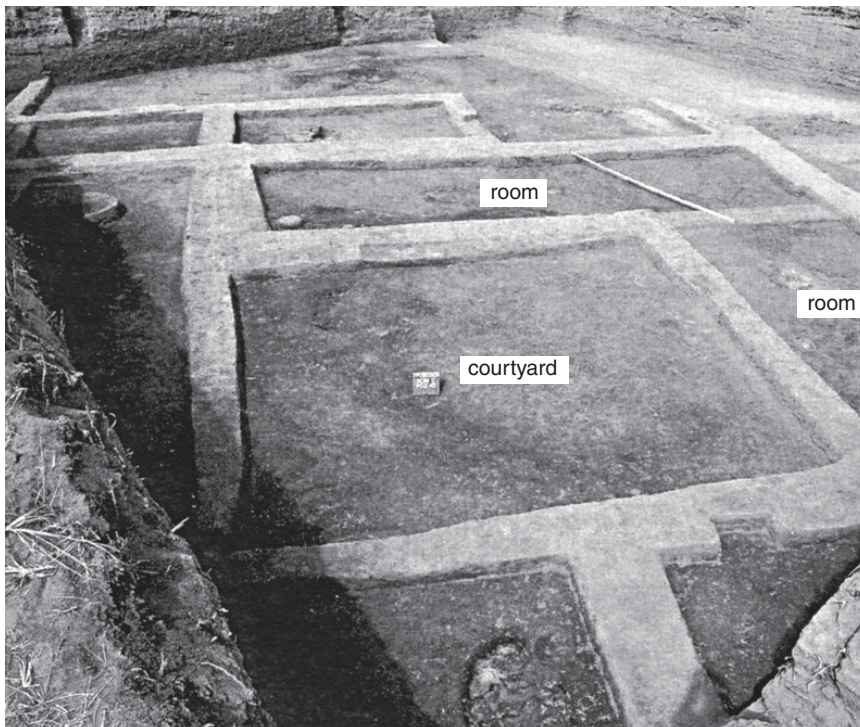
Supports made of fired clay



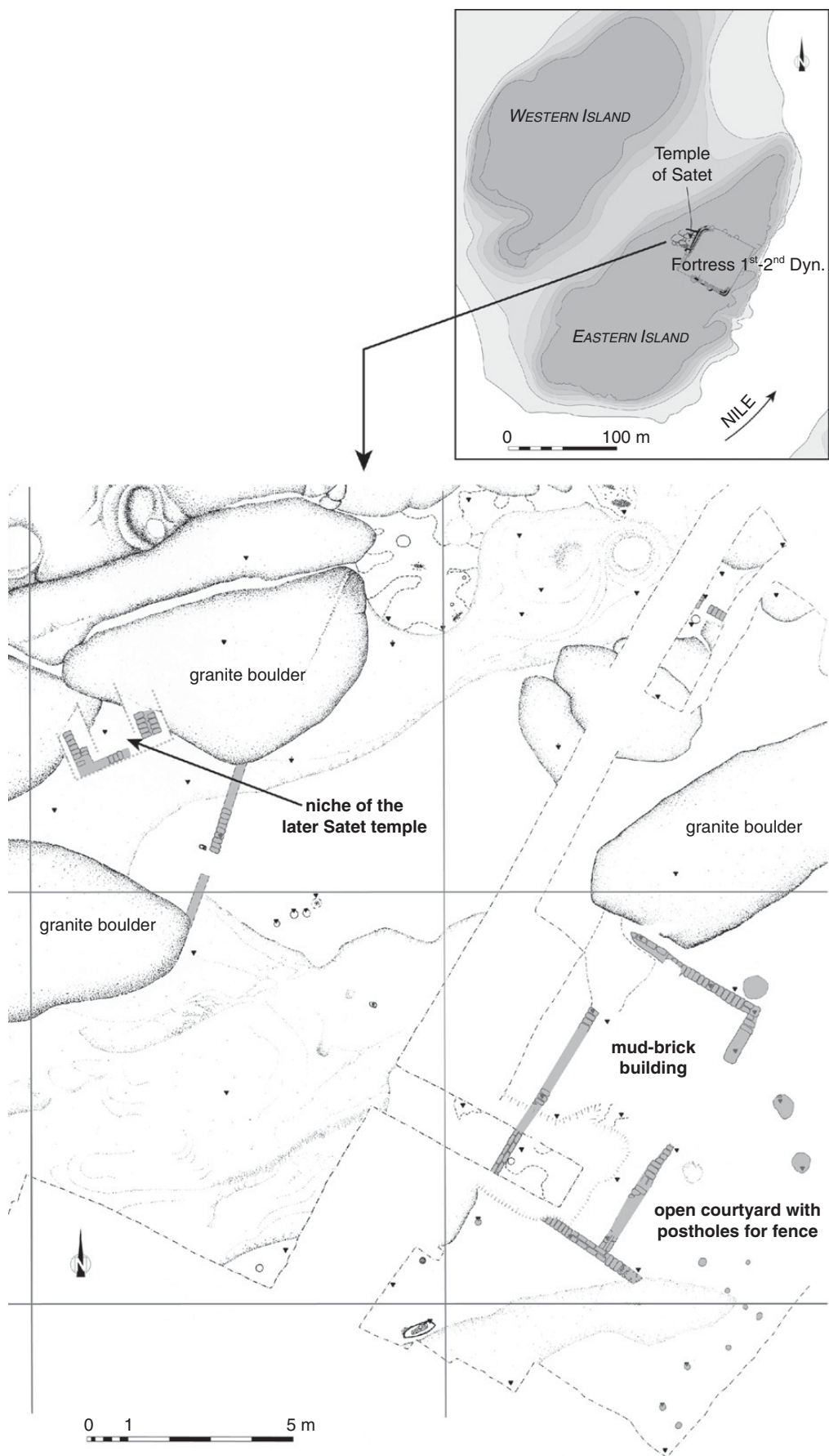
4.5. Mud-brick building, Phase IIIId (Naqada IIIA period), at Buto. After T. Von der Way, *Tell el-Fara'in – Buto I. Ergebnisse zum frühen Kontext. Kampagnen der Jahre 1983–1989*, AV 83, 1997, 119, Abb. 62 and Tf. IXa. © Deutsches Archäologisches Institut, Kairo.



4.6. Satellite view (2009) of the archaeological area at Tell el-Farkha. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe.



4.7. Mud-brick buildings (Naqada III period), at Tell el-Farkha. After M. Chłodnicki and K. M. Ciałowicz, "Tell El-Farkha (Ghazala): Season 2005," *PAM* 17 (2005), 148, fig. 5. Courtesy M. Chłodnicki and K. M. Ciałowicz.



4.8. Mud-brick structures in the area of the later Satet temple (Naqada IIIC1 period), at Elephantine. By G. Marouard, after P. Kopp, *Elephantine XXXII. Die Siedlung der Naqadazeit*, AV 118, 2006, Abb. 15.

Kôm el-Gemuwia, where he found a complete stratigraphic sequence of Predynastic to Early Dynastic settlement layers. Not enough was exposed to identify any larger buildings, apart from a house built in the wattle-and-daub technique standing next to a thick mud-brick wall (3 m wide) of unknown function dating to the Naqada III period.²⁸ Thus evidence for the emergence of full mud-brick buildings remains difficult to fully assess at this site.

More evidence but unfortunately less clearly datable was found by William Flinders Petrie and James Quibell at the site of Naqada – ancient Nubt – that is associated during later periods with the worship of Seth. The site is situated on the west bank of the Nile in the Qena bend region (Figure 4.9). While excavating a large Predynastic cemetery, remains of a substantial building complex were found at the so-called South Town area. The plan was published only as a sketch showing several mud-brick walls belonging to rectangular buildings that were surrounded by a substantial wall with a thickness of about 2 m (Figure 4.9). The preserved sections of this perimeter wall enclose an area of 34 m by 50 m, but the full extent is not known, and it is also not entirely clear whether the wall was enclosing the settlement or an important building complex (see Figure 4.9).²⁹ Later fieldwork at the site found no traces of the wall nor the structures on its inside, which must have been destroyed by the extensive sebkha digging that affected much of the ancient settlement. From this reinvestigation, a chronological framework for the Prehistoric cemetery and settlement at Naqada was much more firmly established and showed a continuous occupation from the Naqada I period onward.³⁰ The buildings Petrie and Quibell excavated seem to be of late Naqada II/early Naqada III date.³¹

As can be seen from the various examples presented here, the comparison of mud-brick buildings of domestic character from different sites and regions in Egypt shows that there is some variation as to their sizes and layouts, and there seems to be neither any kind of house type(s) that can be recognized nor any specific hierarchy among the buildings of each settlement. In areas where a larger extent of the early settlement was uncovered, it is possible to observe smaller rooms in the front giving access to a larger, rectangular, hall-like room in the back.

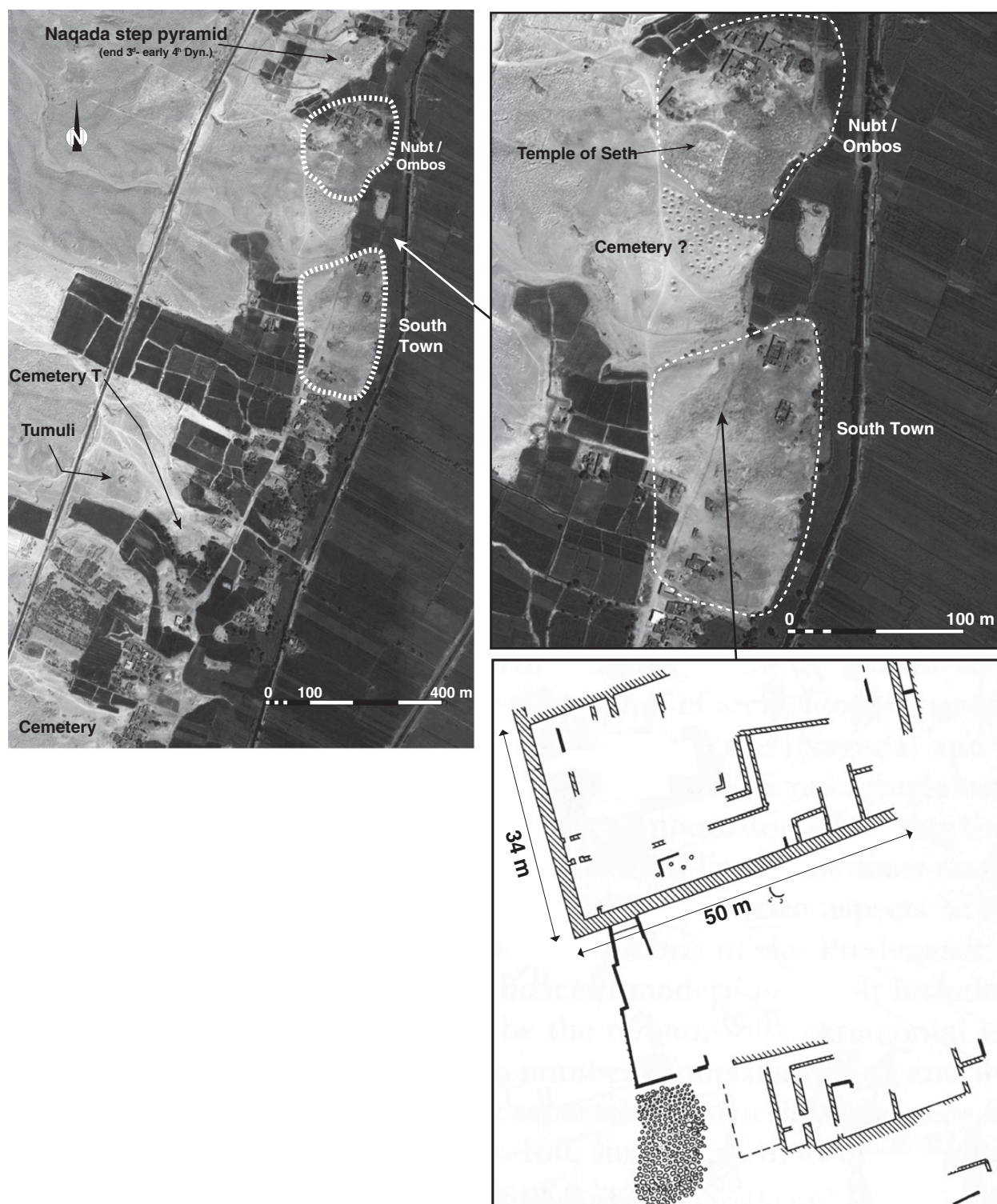
In most cases it has been difficult to distinguish the various rooms that belonged to a single structure, because all that is visible on the plans are walls forming rooms that are built against each other in an agglutinated way, without any clearly demarcated building boundaries. The

term “agglutinated” is used here with reference to the fashion in which buildings were constructed and organized within a given settlement. An agglutinated form of settlement is characterized by a multitude of mud-brick buildings that share common walls; rooms have been added consecutively against each other without showing any distinct organizational pattern. Individual houses and even streets or pathways are difficult to recognize in an agglutinated settlement layout. This seems to be one of the main characteristics of settlements dating from the end of the fourth millennium BCE well into the third millennium BCE in Egypt.

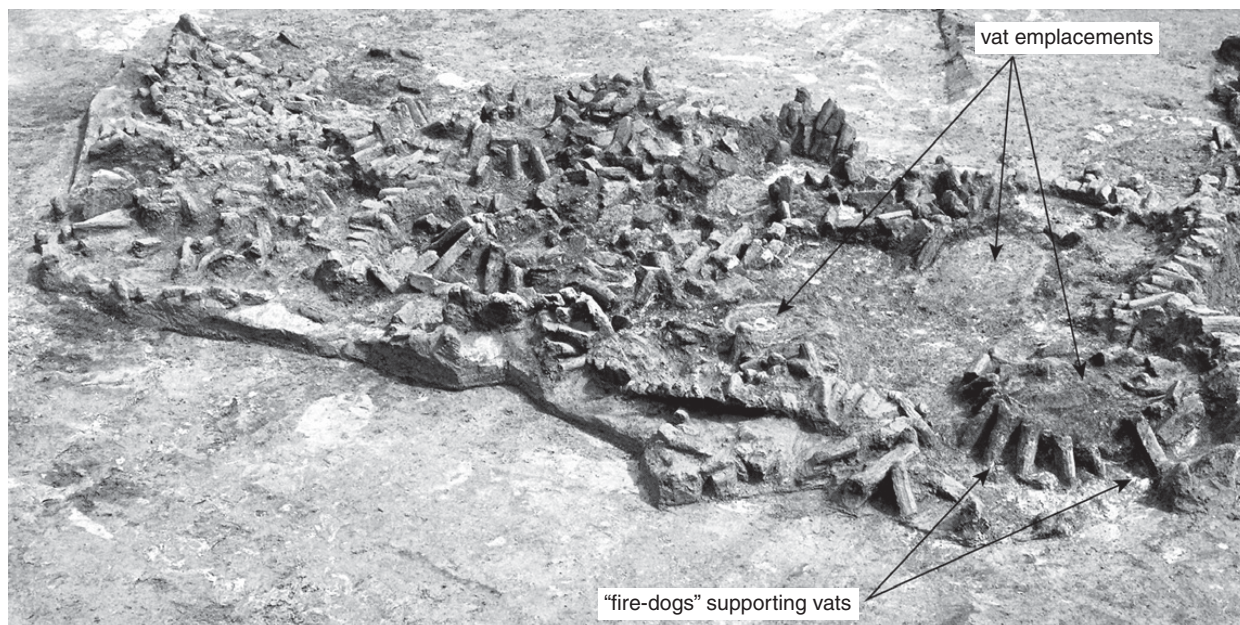
4.2.3 Manufacturing and production areas along the settlement margins

The archaeological evidence at Hierakonpolis shows the presence of specific parts within the wider settlement that were used for large-scale food production such as breweries and also for the manufacturing of stone and ceramics (see, for example, Figures 4.20 and 4.21). These installations were clearly producing more than the demands of a single household. They start to appear during the second half of the fourth millennium BCE (ca. 3500/3400, Naqada IIA/B).³² The evidence for those installations is not restricted to Upper Egypt, however, but has also been discovered at the site of Tell el-Farkha in the eastern Nile Delta, where they belong to the Lower Egyptian culture (Figure 4.10).³³ Three phases of breweries have been distinguished, and they were dated to about 3500–3350 BCE.³⁴ Interestingly, there are also parallels in the layout of the breweries, which were equipped with large vats held up by firedogs at both sites. The large-scale exploration of the desert edge at Hierakonpolis has shown that these production and manufacturing sites were situated along the margins of the actual settlement. At Tell el-Farkha this could also be the case when taking into account the regular flooding of brewery structures on the Western Kôm, where they were situated along its western side (Figure 4.10).³⁵

These installations provide first evidence for a certain division of labor and the possibility that some part of the inhabitants were not engaged full time in agricultural activities. For the brewery installations, it is likely that the people involved in beer brewing were supported by others in terms of food supply and ingredients, but more-practical issues need to be considered as well, such as the regular procurement of firewood. The appearance of specific workshops also dates to the time frame of the breweries.



4.9. Satellite view (2006) of the archaeological area at Naqada and the South Town area at Nubt (late Naqada II–early Naqada III period). By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and site plan after B. Kemp, *Ancient Egypt, Anatomy of a Civilization*, London/New York 2006, 79, fig. 24.



4.10. First phase of breweries on the Western Kôm at Tell el-Farkha (Lower Egyptian culture). After K. M. Ciałowicz, “The Predynastic/Early Dynastic Period at Tell el-Farkha,” in E. Teeter (ed.), *Egypt before the Pyramids. The Origins of Egyptian Civilization*, OIMP 33, 2011, 57, fig. 6.2. Courtesy M. Chłodnicki and K. M. Ciałowicz.

At Hierakonpolis several pottery workshops have been identified that produced certain types of pottery. A production area along the Wadi Abu Suffian might have been related to the supply of the nearby elite cemetery, HK 6 (Figure 4.18).³⁶ This workshop is an interesting example for considering the possible purposes and functions of such installations, and it is situated along the south side of Wadi Abu Suffian, at about 300 m northeast of the elite cemetery. HK 11C is divided into two main areas of excavation: the pottery and beer production site (Operation B) and, 20 m east of it, a much larger brewery installation (Operation A) (Figure 4.20). Dense scatter of broken pieces of pottery belonging to jars of the so-called straw-tempered rough-ware type have been found here and were obviously produced at the kiln site, as has been witnessed by a large amount of “wasters,” sherds from misfired and often vitrified pottery vessels. This type of pottery was also found in tombs from the cemetery at HK 6. The archaeological evidence therefore shows clearly that this type of pottery was produced at the kilns located at HK 11C and then given as grave goods for the burials of the elite members of Hierakonpolis society during the early Naqada II period. When studied in depth, it turned out that these vessels were exclusively produced as funerary items for the elite

tombs of the period, without ever being used.³⁷ The nature of the pottery production site at Operation B has been commented on by the excavators as being more seasonal, with pottery production occurring as a low-intensity activity.³⁸ The brewing facility in Operation B, which consists of several vats, and the larger one at Operation A cannot be linked directly to the production of rough-ware jars, because beer was not stored in the vessels found.³⁹ A question remains to be answered: What purpose was served by the large industrial brewery and food-producing installations at Operation A? There was certainly a connection with the elite cemetery, according to its location and the sheer amount of production capability. Evidence so far points to a more exclusive use for the cemetery. The presence of large wooden-columned halls near these tombs suggests that they were some kind of forerunner to the later “offering chapel.” This is a fascinating piece of evidence in the evolutionary line of the ancient Egyptian mortuary cult.⁴⁰

4.2.4 Evidence for early temples and ceremonial structures

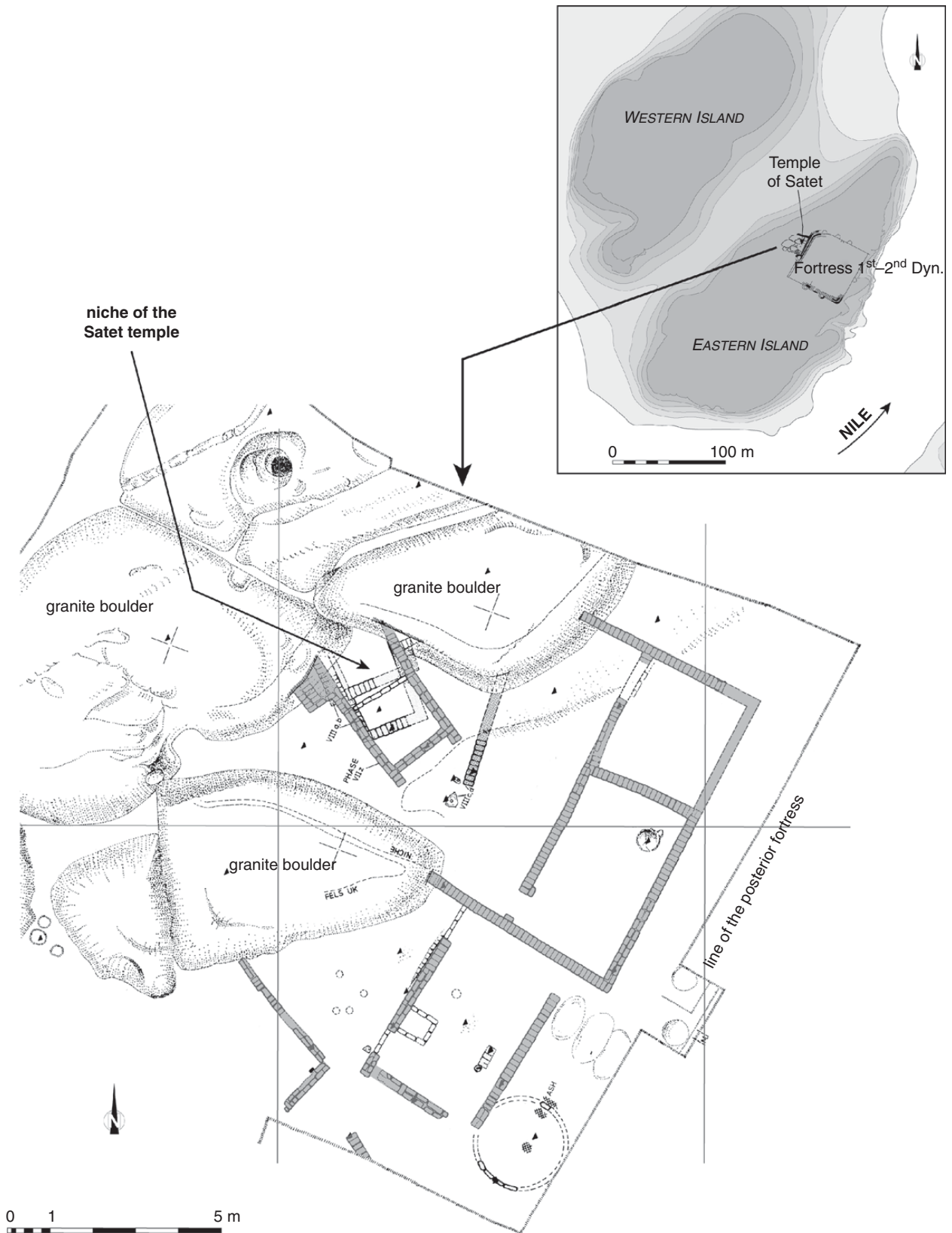
The Early Dynastic Period is also the time of the emergence of the so-called preformal temple buildings.⁴¹

Apart from Hierakonpolis, where a close link to the royal cult can be observed – for example, from the objects of the Main Deposit discovered at the temple at Kôm el-Gemuwia (see [Figure 4.25](#) for location of the temple precinct) – other sites are much more obscure and resemble small, informal cult complexes and shrines. Even the worshipped deities are difficult to identify. However, what all these sanctuaries have in common are small votive figurines of animals and humans made of ivory or faience that were found in deposits utilized when these objects fell out of use and were ritually buried.⁴² These earliest shrines are very informal in their layouts and were an integral part of the local community, which was responsible for the construction, supply, and functioning of the local cult. There is no evidence for these places of worship having received any attention by the central government before the end of the Old Kingdom.⁴³ Nevertheless, they constitute an integral part of the emerging settlements and developed gradually into temples dedicated to the local town gods. One of the earliest ceremonial centers has been excavated at Locality HK 29A at Hierakonpolis ([Figure 4.23](#)); it consists of a large oval courtyard flanked by four cedar beams probably used as flagstaffs during the ceremonies that were performed here. Excavations at Elephantine have revealed the location of the earliest shrine between the rock boulders of the eastern island, which formed a small niche ([Figure 4.11](#)).⁴⁴ The development of this sanctuary from a small cave-like place of worship to the large formal temple buildings of Middle and New Kingdoms has been followed during the excavations.⁴⁵ A large number of small votive objects from this place consist of ivory and faience figurines depicting various animals and human figures. Such figurines have been found at other sites even as far north as Tell el-Farkha and Tell Ibrahim Awad in the Nile Delta, indicating a remarkable similarity in the cultural expression for votive objects during the Early Dynastic period.⁴⁶ At Tell Ibrahim Awad, a site located in the northeastern Delta, a sequence of shrines and small temples dating from the late Predynastic (Naqada IIIA/B) to the Middle Kingdom have been excavated ([Figure 4.12](#)). The architectural remains show a similar development from informal local architecture to the more mature temple layout known from the Middle Kingdom onward, as can be witnessed at Elephantine.⁴⁷ Only a few wall fragments remain of the earliest temple structure, and these outline a long, rectangular building measuring about 8.8 m in length and 3.5 m in width ([Figure 4.12](#)).

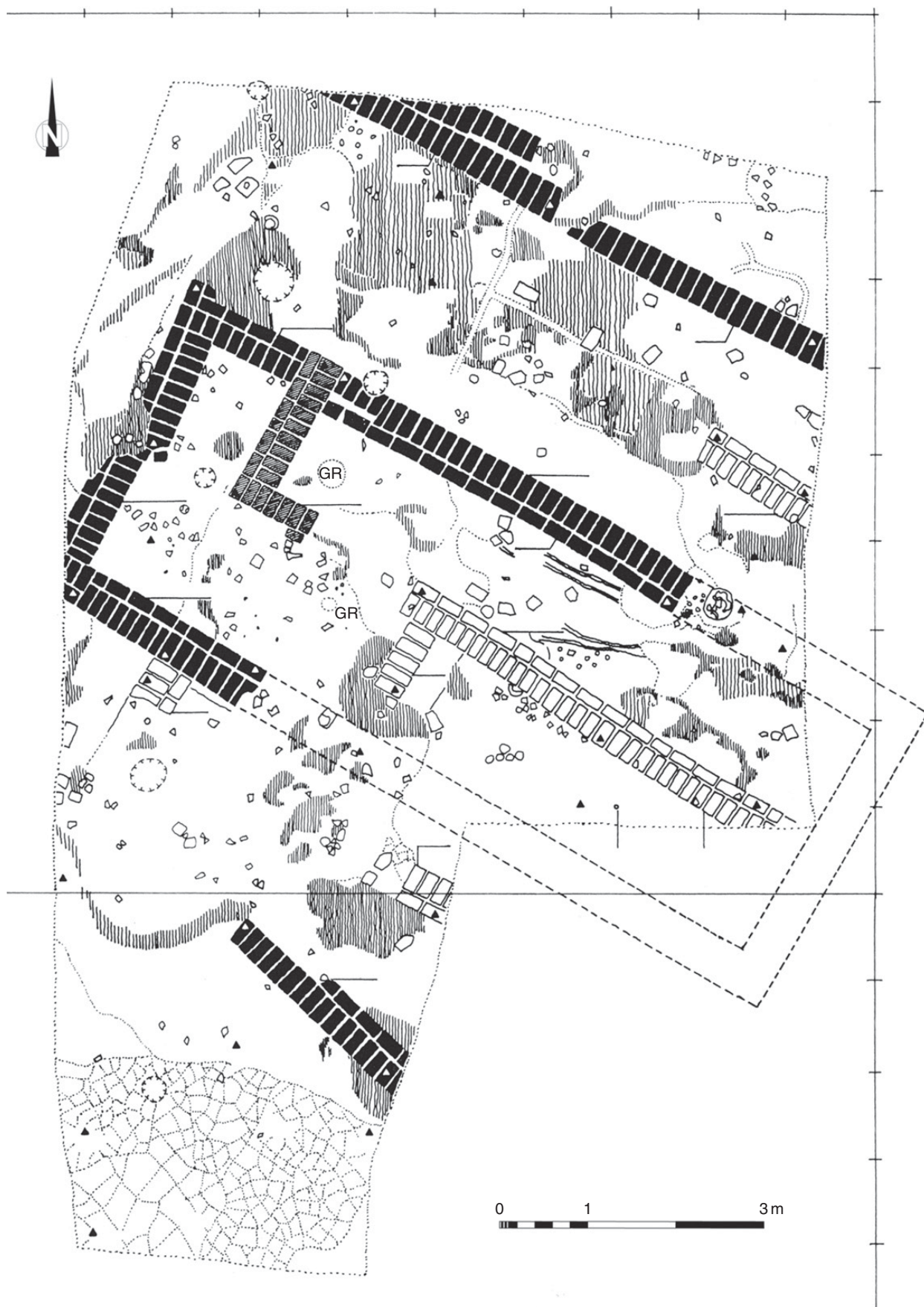
4.2.5 The archaeological evidence for “official” buildings

The identification of official or administrative buildings remains difficult for these early periods. The earliest evidence for an administrative/official building complex has been excavated recently at Tell el-Farkha; the complex also served as a residence for the local elite.⁴⁸ On the Western Kôm, a large building complex termed the “Naqadian residence” has been discovered for which two phases of construction can be distinguished: an earlier phase dating to the Naqada IID2/Naqada IIIA1 period and later phase belonging to the Naqada IIIA2 period. The exceptionally large dimensions of this complex – covering more than 500 m² and built with substantial mud-brick walls, some of which measure between 2.5 m and 1 m in width – distinguish it as one of the largest-known buildings for this time period ([Figure 4.13](#)). The inhabitants already belonged to the sphere of the Naqada culture, which had replaced the earlier Lower Egyptian culture in the region by this time. As for the function of the massive building complex, it has been suggested that it might have played an important role in trade with the Palestinian region, according to fragments of foreign pottery found during the fieldwork. Evidence for administrative activity comes from clay sealings that have also been excavated at this site. The complex probably functioned as an elite residence, with possible links to the larger trade network connecting the Delta and Palestinian regions as well as Upper Egypt. This explanation fits well with the evidence for long-distance trade and the emergence of the administrative system, including evidence for early writing, that has been found at the exceptional tomb U-j situated at Abydos, which probably belonged to an early ruler controlling the northern parts of the country.⁴⁹

However, currently the best-known examples of official structures are two large building complexes of possibly palatial character and enclosed by a perimeter wall that have been excavated at Buto and Hierakonpolis, respectively (see [Figures 4.32](#) and [4.26](#)). Both examples date to the Early Dynastic Period. The internal layout consists of a multitude of connecting rooms and courtyards that are often difficult to assess in terms of their precise use and function. In both cases it is not clear how the building complex relates to the remainder of the settlement. At Hierakonpolis, the presence of clay sealings in one of the rooms indicates that some administrative activity might have taken place there.⁵⁰ Magazine-like rooms probably



4.II. Temple of Satet during the Early Dynastic Period at Elephantine. By G. Marouard, after G. Dreyer, *Elephantine VIII: Der Tempel der Satet*, AV 39, 1986, 13, Abb. 1.



4.12a. Plan of the early shrine (Dynasty 0) at Tell Ibrahim Awad. After D. Eigner, "Tell Ibrahim Awad: Divine Residence from Dynasty 0 until Dynasty 11," *Ägypten und Levante* 10 (2000), 34, fig. 10. Courtesy of D. Eigner.



4.12b. View of the early shrine (Dynasty 0) at Tell Ibrahim Awad. After D. Eigner, “Tell Ibrahim Awad: Divine Residence from Dynasty 0 until Dynasty 11,” *Ägypten und Levante* 10 (2000), 31, pl. IIIb. Courtesy of D. Eigner.



4.13. View of the Naqada period “residence,” Western Kôm at Tell el-Farkha. After K. M. Ciałowicz, “From the Residence to Early Temple: The Case of Tell el-Farkha,” in K. Kroeper et al. (eds.), *Archaeology of Early Northeastern Africa*. In memory of Lech Krzyżaniak, Poznań 2007, 922, fig. 4. Courtesy M. Chłodnicki and K. M. Ciałowicz.

used for large-scale storage were excavated at Buto in one part of the building complex.⁵¹ Such features suggest that these complexes functioned as a kind of palatial complex

for a powerful leader in charge of the town or even on a wider regional level – a kind of early version of the governors’ residences known from the Dynastic period.



4.14a. Early Dynastic administrative-residential complex, Western Kôm at Tell el-Farkha. After K. M. Ciałowicz, “The Early Dynastic Administrative-Cultic Centre at Tell el-Farkha,” *BMSAES* 13 (2009), 103, fig. 10. Courtesy M. Chłodnicki and K. M. Ciałowicz.



4.14b. Early Dynastic administrative-residential complex, Western Kôm at Tell el-Farkha. After K. M. Ciałowicz, “The Early Dynastic Administrative-Cultic Centre at Tell el-Farkha,” *BMSAES* 13 (2009), 103, fig. 11. Courtesy M. Chłodnicki and K. M. Ciałowicz.

Another substantial administrative building complex of the Early Dynastic Period (early Dynasty 1) has been discovered on the Western Kôm at Tell el-Farkha (Figure 4.14).⁵² Residential and official areas have been excavated, including two deposits of votive objects that also suggest the presence of shrines within the complex.⁵³

The excavations revealed two cult deposits consisting of small votive objects in the form of figurines made of ivory and faience. One of the deposits was found in a small room measuring 3 m by 3.2 m – of square layout and built with unusually thick mud-brick walls of 1.2 m – which seems to have functioned as a cult place (Figure 4.14b). It

was surrounded by further rooms built of thinner walls and showing evidence for domestic use in features such as hearths, storage vessels, and grinding stones that seem to characterize the residential part. The interior of the whole building complex was constructed in the same way as has been observed at the other official structures described previously, where the interior of each large complex consists of numerous interconnecting rooms without any obvious hierarchy, in the agglutinated way typical for this period (Figure 4.14a).⁵⁴ It seems that the three typical elements (residential, official, and cultic parts) that characterize the residences of local governors and mayors of the later Pharaonic periods are already present here. Excavations at this site are still in progress, and the perimeters of the building have not yet been fully identified.

Another identifying element for official building complexes is the perimeter wall, which physically separated them from the rest of the settlement. The most elaborate enclosure was found at Hierakonpolis, where the gate area was built in a niched pattern that has been called “palace façade” style (Figure 4.26).⁵⁵ This decoration has an intrinsic symbolic meaning closely but not exclusively linked to ancient Egyptian kingship. The remainder of the enclosure was decorated with a small protruding buttresses on the outside, for at least the stretch of wall that was directly linked to the gate (see Figure 4.27). Up to the discovery of this elaborately constructed gateway, all monuments and constructions showing a palace-façade motif had come from the funerary sphere, such as the exterior decoration of mud-brick mastabas belonging to the highest elite of the time. Such a palace-façade decoration can also be seen on the exterior walls of the large funerary enclosures of the Early Dynastic Period at Abydos, the mastabas at Saqqara and at the later enclosure wall made in stone surrounding the Djoser pyramid complex (Third Dynasty).⁵⁶

As for the precise purpose of this building complex within the town center of Hierakonpolis, the interpretation remains speculative (see full discussion following), but it is clear that the enclosure marked a very specific building area – possibly a type of “palace.” At Buto, the enclosure wall is not decorated but also surrounds a building complex of importance and has a kind of monumental entrance gate in its center. There are, in addition, certain elements that were uncovered inside that clearly mark it as a structure with official functions (Figure 4.32).⁵⁷ A possible third example of an official building complex was found at the “South Town” at Naqada. Only a part of the perimeter wall has been

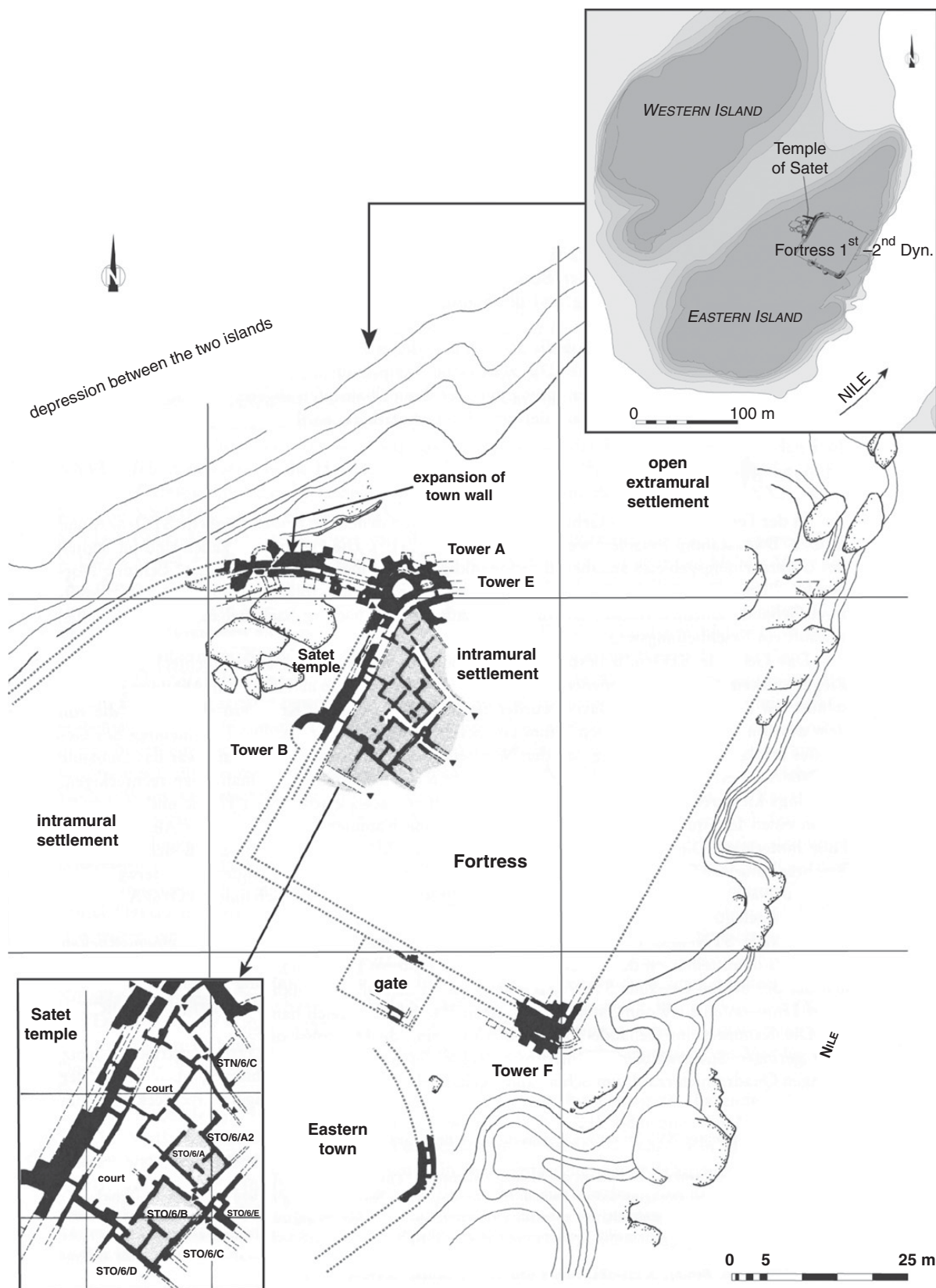
found, with few remains of mud-brick buildings inside it (see Figure 4.9). It has been suggested that it functioned as an early palace or administrative complex, but there is not enough data to confirm this hypothesis.⁵⁸

These examples show quite clearly that official buildings can be recognized especially by their perimeter walls, while their internal layout is not much different from that of the rest of the settlement. A slightly different situation might be detectable at Tell el-Farkha, where substantial mud-brick walls of 1.2 m thickness characterize the main walls and those surrounding one of the votive deposits; these walls seem to be different from the thinner ones in the areas that have been identified as domestic in function (Figure 4.14b).⁵⁹

The perimeter walls may have primarily served the purpose of separating the more “official” building complex from the rest of the settlement, marking its exclusivity. At the same period during which these official structures appear in the archaeological record, the presence of larger town walls can be found too, delineating an increase in complexity within the layout of the earliest towns.

4.2.6 The evidence for enclosure walls

The Early Dynastic Period is also the time when the first enclosure walls appear around settlements, functioning as town walls and often fortified; however, the presence of such enclosures also marks fortresses. At the island of Elephantine, a square fortress with a thick mud-brick enclosure wall was erected during the First Dynasty. From the end of the First to the mid-Second Dynasty, additional walls were attached against the south and western sides of the fortress in order to include within a defensive enclosure the entire local settlement that had developed to the south and north of the fortress.⁶⁰ The fortress remained at the heart of the settlement (see Figure 4.15).⁶¹ However, the mud-brick buildings inside it and those on the outside, which belong to the wider settlement at Elephantine, indicate no visible distinction between the two areas with regard to size, construction technique, thickness of walls, and layout of buildings (Figure 4.15).⁶¹ They seem to be identical and consist of smaller rooms arranged around larger courtyards, with evidence for domestic activities such as storage (small round silos), fireplaces, and deposits from settlement waste.⁶² This marked lack of differences in the buildings within and outside of the fortress shows clearly that apart from the fortress walls themselves, no larger planning was



4.15. Early Dynastic fortress and settlement (second half of 1st Dynasty–early 2nd Dynasty) at Elephantine. By G. Marouard, after W. Kaiser et al., “Stadt und Tempel von Elephantine, 19./20. Grabungsbericht,” *MDAIK* 49 (1993), 137, Abb. 1.

conducted for the organization of the interior. And probably the same community occupied the inside of the fortress as well as the outer settlement at that time. The fortress is mainly characterized by its massive enclosure wall, but the internal structures do not follow any specific layout, nor does there seem to be any hierarchies among them that can be recognized from the architecture alone; it is also difficult to distinguish individual buildings, because they were constructed in the same agglutinated fashion that is typical for Early Dynastic settlement remains in general. This design stands in sharp contrast to that of the later fortresses in Lower Nubia, which were built during the Middle Kingdom.⁶³ All of those fortified structures have a very specific and strictly orthogonal layout and organization in the interior – quite different from domestic quarters encountered in most contemporary settlements at the time (with the exception of state-planned towns) and constituting evidence for large-scale planning.⁶⁴

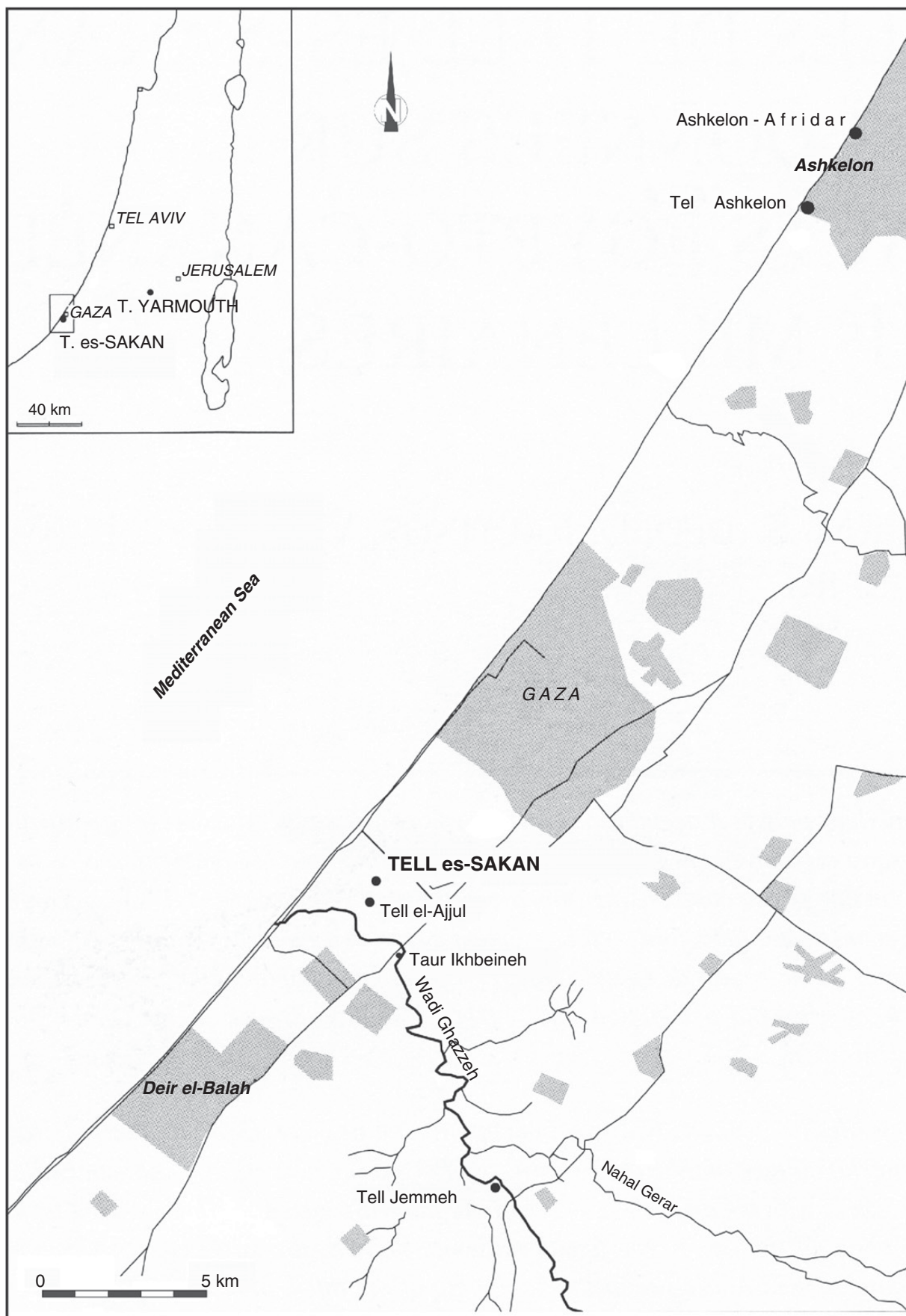
The fortress of Elephantine, dating to the First Dynasty, has one of the earliest examples of a large, fortified, mud-brick enclosure wall. During the Second Dynasty, additional wall segments of similar characteristics were added to enclose the growing settlement on the island (Figure 4.15). These massive fortifications are certainly linked to the island location of this site at the southern border of Egypt, but they are also evidence for the existence of and the ability to build mud-brick walls of very large scale that early – at the end of the Predynastic/Early Dynastic periods. The walls stand in sharp contrast to the thin ones of domestic dwellings that were typical at that time.

Tell es-Sakan, which is situated about 5 km south of Gaza in southern Palestine (Figure 4.16), provides new evidence for a sequence of fortified mud-brick enclosure walls; this is considered one of the earliest Egyptian examples known so far.⁶⁵ The site was partially excavated in 1998 as part of a rescue excavation during modern construction work and yielded evidence for various phases of settlement dating to the Early Bronze Age. The Egyptian occupation encompasses phases A-9 up to A-6 (Figure 4.17). The first phase of settlement was well preserved and did not show any signs for the presence of a defensive wall. However, from phase A-7 onward, three successive phases of enclosure walls (A1, A2, and B) were discovered (Figure 4.7). The oldest one, enclosure A1, was 1.5 m wide and still preserved to a height of about 1.5 m.⁶⁶ In a second phase, enclosure A2 was added against its interior – probably in order to reinforce it.

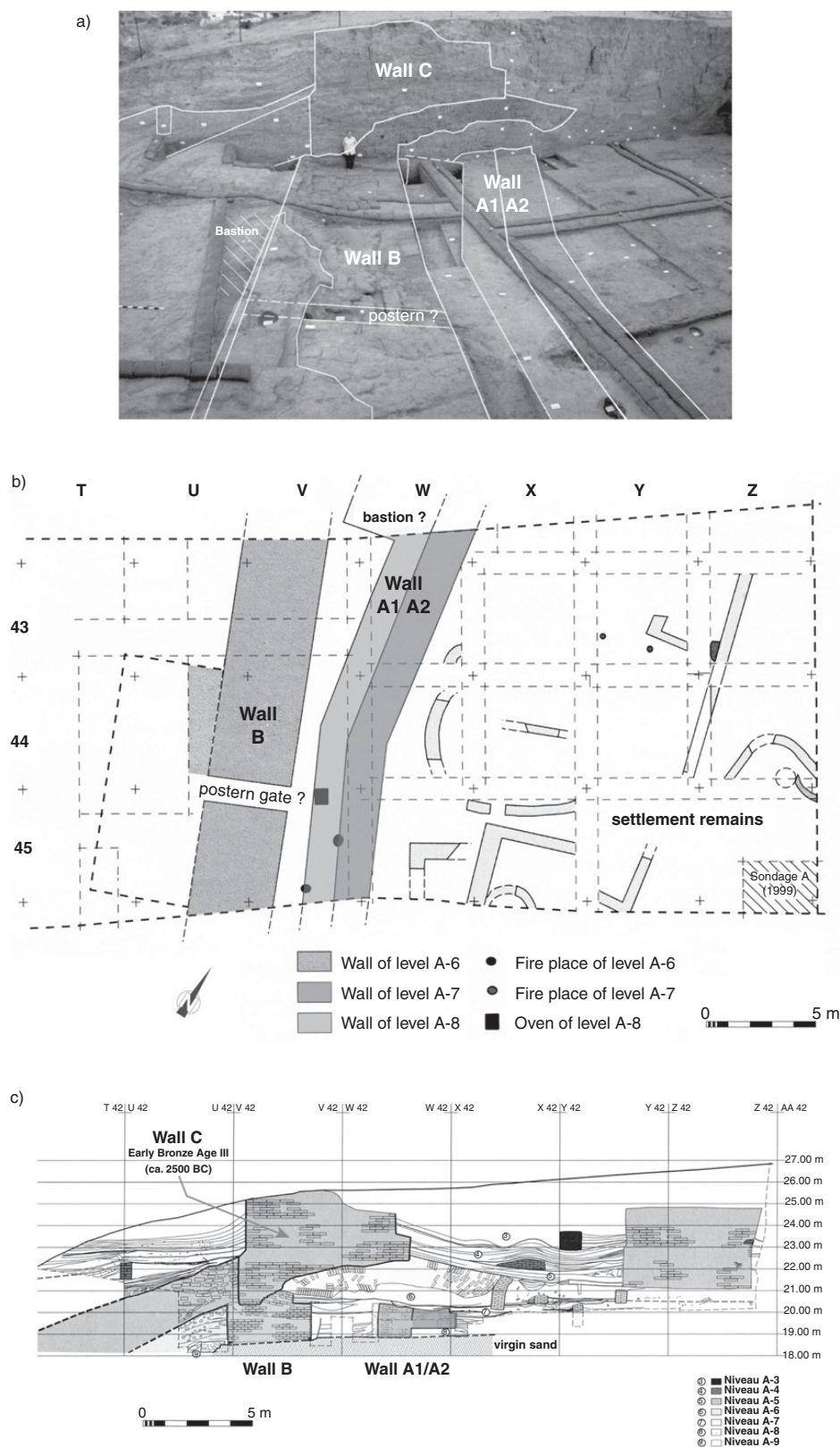
The total width of both walls reached 3.55 m, and three consecutive floor levels can be associated with it. In the next phase of occupation, both parts of Wall A were dismantled and a new, thicker enclosure wall, Wall B, was built above it, following the same orientation. Wall B had a thickness of 3.80 m and was preserved up to 1.8 m in height in the cuts of the archaeological trenches.⁶⁷ Additional evidence for its defensive function comes from a large glacis, also made of mud brick, added against its exterior; it measured 5 m in width and protected the base of the enclosure wall (Figure 4.17).

Along the interior of this enclosure, thin mud-brick walls forming rectangular buildings and several round silos were uncovered, pointing to a domestic character, without any evidence for a hierarchy among the structures. This design is very similar to the evidence from Egypt of the same time period. Even the organization and layout of the buildings is comparable to that found in Egypt proper, and the fully Egyptian character of this settlement has also been confirmed by the presence of purely Egyptian objects, especially pottery.⁶⁸ According to the pottery evidence, the various building phases of this enclosure and settlement date mainly from 3300 BCE to about 3000 BCE, encompassing most of Dynasty 0 (= Naqada IIIB–C).⁶⁹ The sequence of enclosure walls can therefore be considered the earliest-known Egyptian example of defensive character; the only other site that also shows clear evidence for successive fortified enclosure walls is Elephantine, which dates from the First Dynasty onward. Here the walls were continually enlarged to enclose the growing settlement on the eastern island. Interestingly, such mud-brick enclosure walls are rare in Palestine, and there are only two examples that are roughly contemporary to Tell es-Sakan: one was found at Megiddo and another at Tel Shalem, both dating also to the end of the Early Bronze Age IB period and located further north, though these examples were not enclosing Egyptian settlements.⁷⁰ Tell es-Sakan is currently the only fortified settlement in the southwestern part of Palestine and probably functioned as an Egyptian colony securing important trade networks. For Egypt proper, it is difficult to assess whether the appearance of large, fortified enclosure walls can be linked to any specific region, but they are evidently present in the border regions.

The other main function of enclosure walls is as perimeter walls around specific building areas that are not defensive in nature but should be understood as delineating an exclusive zone or building complex of



4.16. Position of Tell es-Sakan in the Gaza region. After P. de Miroschedji et al., “Les fouilles de Tell es-Sakan (Gaza): Nouvelles données sur les contacts Égypto-Cananéens aux IVe-IIIe millénaires,” *Paléorient* 27 (2001), 76, fig. 71. Courtesy of P. de Miroschedji.



4.17. View, plan, and northern profile of the different phases of enclosure walls, Area A at Tell es-Sakan. By G. Marouard, after P. de Miroschedji et al., “Les fouilles de Tell es-Sakan (Gaza): Nouvelles données sur les contacts Égypto-Cananéens aux IVe-IIIe millénaires,” *Paléorient* 27 (2001), 82, figs. 86, 88, and 89. Courtesy of P. de Miroschedji.

official character (see previous discussion). From the archaeological evidence, it can be deduced that a wall with a thickness of two meters or more is most likely an enclosure wall and could have functioned either as a settlement enclosure or as marking an important building complex. The known examples range from relatively simple perimeter-style walls to decorated enclosures such as the palace-façade gate and wall at Hierakonpolis. The enormous mud-brick walls that form the royal funerary enclosures at Abydos can be considered a third kind of enclosure wall – probably with a more symbolic or ritual function. There is currently no evidence for any early temple enclosure wall predating the Old Kingdom. The so-called fort structure at Hierakonpolis, which has been associated with the Second Dynasty ruler Khasekhemwy is another puzzling building marked by a massive enclosure wall and fortified entrance, but its precise function remains speculative.⁷¹ It resembles most closely the funerary enclosures at Abydos, although it probably did not share their function as a funerary monument.⁷²

These various characteristics discernible from the earliest settlements provide a useful framework for the investigation of two sites for which there is a considerable amount of information available from archaeological fieldwork. The best-known settlement encompassing the entire evolution from the Predynastic to the Early Dynastic Period is Hierakonpolis. Together with the settlement at Buto and the new evidence there, these sites are currently the most complete ones that have been studied thus far. They also provide comprehensive evidence for the emergence of early urban centers in Egypt and the beginnings of urban society.

4.3 THE CASE OF HIERAKONPOLIS

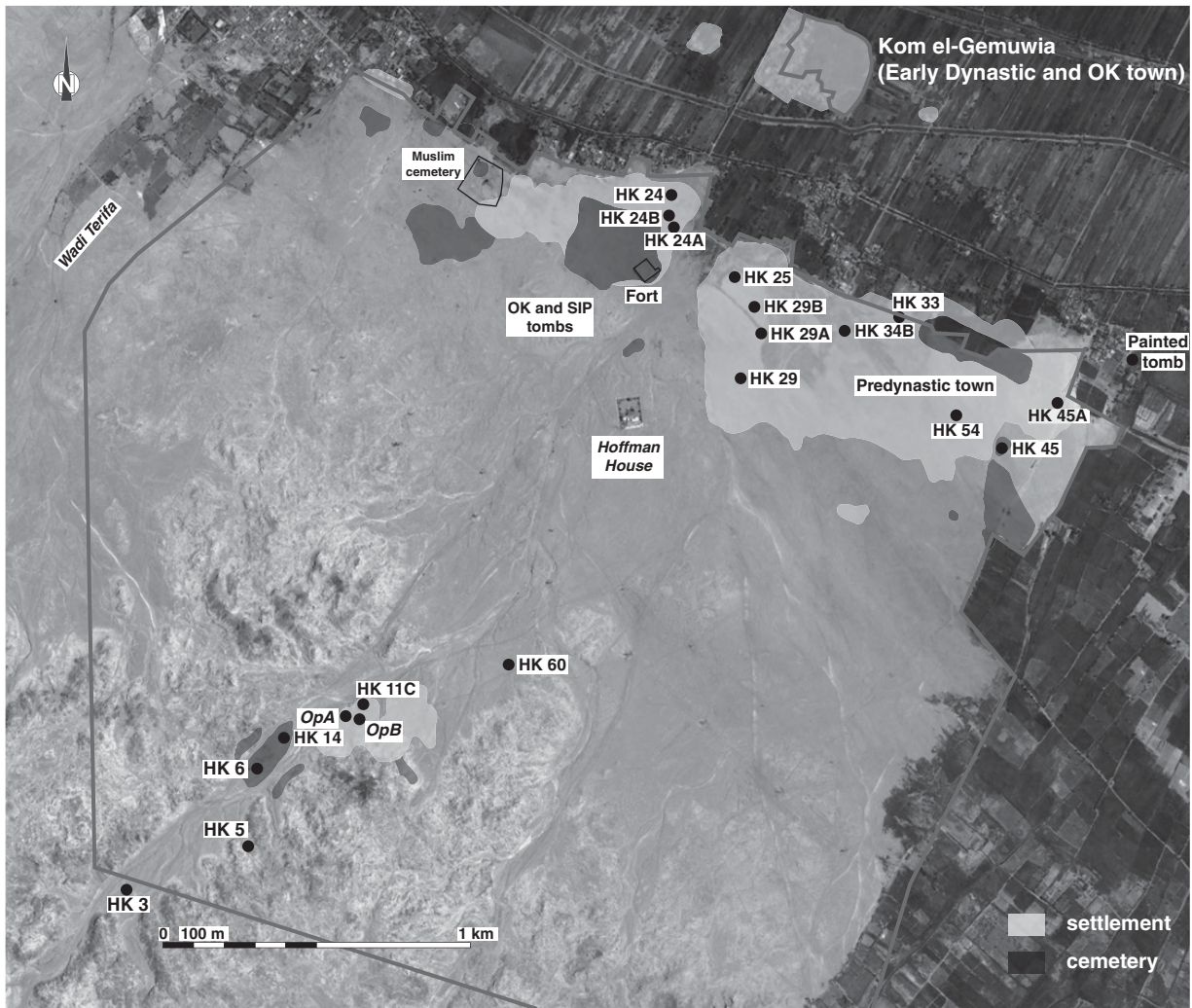
The ancient city of Nekhen has been regarded as one of the key Upper Egyptian sites that can be closely linked to the emergence of the ancient Egyptian state and the formation of early kingship.⁷³ It has also been interpreted as the seat of power for early rulers exercising power over a larger region or “proto-kingdom,” until it became integrated into the administrative system of provinces during the early Old Kingdom as the capital of the third Upper Egyptian nome.⁷⁴ The evolution of Nekhen during this early period of ancient Egyptian history has been investigated through extensive fieldwork carried out at the site and is still in progress.⁷⁵

Nekhen’s importance was recognized during the first excavations at the site more than 100 years ago, which were marked by the discovery of historically important objects such as the Scorpion mace head and, more significantly, the Narmer palette at the “Main Deposit” within the temple.⁷⁶ Scholars have credited King Narmer for unifying the country, according to the depictions on the palette, and have assumed that he had a residence or at least a cult at ancient Nekhen.⁷⁷ The rich archaeological data that has emerged, especially from later fieldwork, confirms that Nekhen had been an important urban center early on, possibly as the capital of a proto-kingdom that played an important role in the formative period of the state.⁷⁸

4.3.1 The Predynastic settlement at Hierakonpolis

The larger region of Hierakonpolis is one of the rare archaeological areas where the development from the Predynastic to the Early Dynastic period can be followed without a break, thus providing an important case study of the emergence of an early urban center and for what factors might have been decisive in this evolution.⁷⁹ It is important to include here a brief overview of the earlier Predynastic settlement, which covers the Naqada I to III periods (3800–3100 BCE), in order to put the later Pharaonic period townsites within the context of this wider development. Large-scale surveys including a drill-core survey and more-detailed excavations in selected areas, which have been conducted since the late 1960s, have revealed a considerable amount of data in order to evaluate the characteristics of the early settlement.⁸⁰ Also, and very much an exception for such research, a more interdisciplinary approach was taken at the site by the beginning of the 1980s.⁸¹

As the situation stands now, it is possible to divide the archaeological area into various parts according to the types of installations, such as cemeteries versus settlements, and also according to the environmental settings, such as desert versus floodplain. The current concession encompasses an area of 144 km² and includes not only very different habitats but also different types of sites with archaeological remains, providing insights into a variety of human activities (Figure 4.18).⁸² Archaeological ground surveys and excavations in the desert area at Hierakonpolis have convincingly shown the emergence of a large Predynastic settlement that includes ample evidence for social stratification and craft specialization as well as a population concentration estimated at

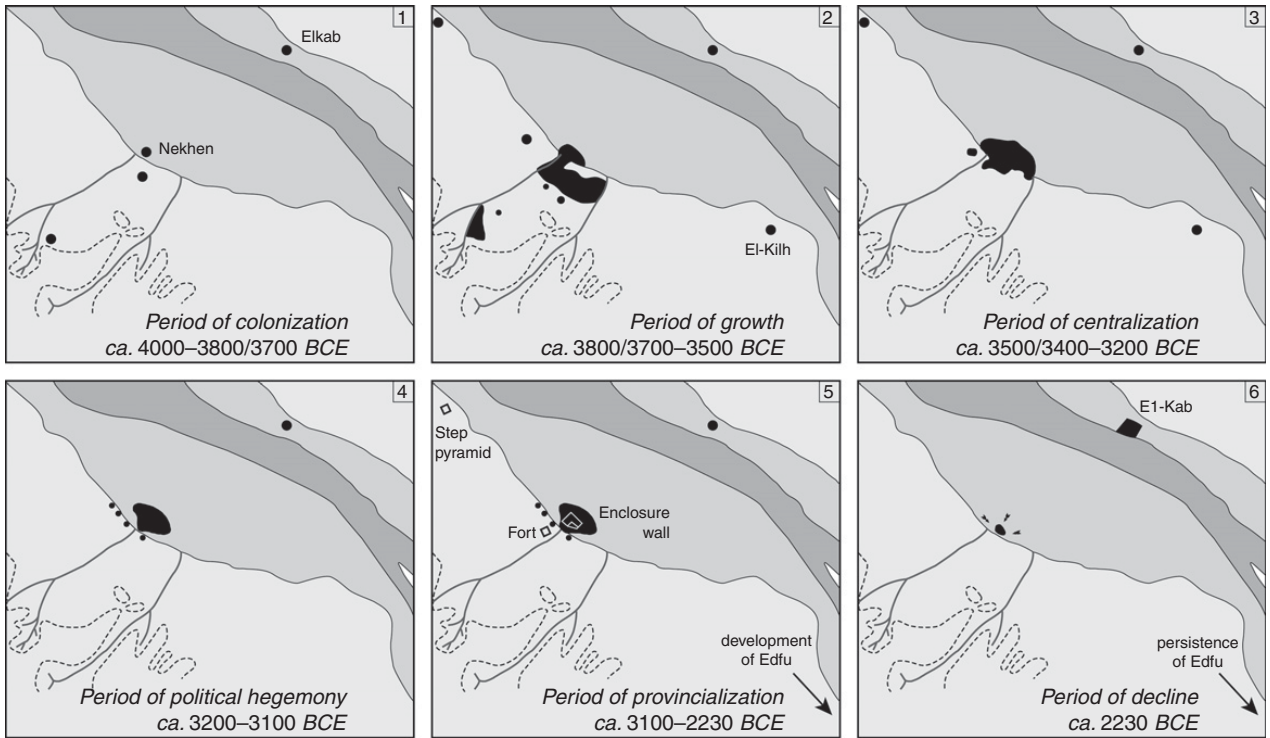


4.18. Satellite view (2009) of the archaeological area at Hierakonpolis. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after M. Hoffman, et al., “A Model of Urban Development for the Hierakonpolis Region from Predynastic through Old Kingdom Times,” *JARCE* 23 (1986), 179, fig. 1; R. Friedman, *Nekhen News* 14 (2002), 2.

between 5,000 and 10,000 people settling in this area of 32 ha to 37 ha by the Naqada IC–IIA period.⁸³ In his groundbreaking study of the urban development at Hierakonpolis, Michael Hoffman was able to discern four major stages that constitute the principal phases in the evolution of settlements, starting with Phase I (Naqada IA–B, ca. 4000–3800/3700 BCE), marked by the first settlers arriving probably from the north and establishing themselves there. The region had the advantage of easily accessible fertile soil and water resources in form, respectively, of Wadi Abu Suffian and a Nile channel running close to the desert edge, and also provided access to raw materials (Figure 4.19). No architectural remains for this earliest phase have been recovered, but

it has been proposed that although the origins of Hierakonpolis might have been in the form of seasonal campsites, the local environment favored the gradual evolution to long-term settlement.⁸⁴

Hoffman determined the second stage of development (Phase II, or the Early Predynastic period) as a period of growth dating between 3800/3700 and 3500/3400 BCE (Naqada IC–IIA/B) (Figure 4.19).⁸⁵ This unusually large area, covering more than 36 ha, includes various habitation and settlement types, which range from seminomadic campsites and isolated clusters of buildings such as hamlets and farmsteads to larger towns.⁸⁶ Of the two largest settlements, one is located close to the edge of the current floodplain,⁸⁷ probably originally spreading



4.19. Development of the Predynastic–Old Kingdom settlement at Hierakonpolis. By G. Marouard, after M. A. Hoffman, H. A. Hamrroush, and R. O. Allen, “A Model of Urban Development for the Hierakonpolis Region from Predynastic through Old Kingdom Times,” *JARCE* 23 (1986), 182, fig. 3.

further toward the east but now lying underneath a cover of thick layers of Nile silt and wadi deposits.⁸⁸ The second-largest site including evidence for settlement activity is situated along the Wadi Abu Suffian.⁸⁹ This latter site has been characterized as a “cluster of multi-functional components including trash mounds, kilns, and habitation areas.”⁹⁰ Furthermore, numerous production sites for pottery and food (bread and beer) have been excavated that have important implications for the organization and functioning of these settlements (see following discussion).

Phase III of the urban development encompasses the Naqada IIB–D periods (ca. 3500/400–3200 BCE) and has been characterized as a time of “centralization” (Figure 4.19).⁹¹ The widespread character of the settlement along the desert edge shrinks to a smaller, more nucleated town of 5–7 ha in size clustering near the border with the floodplain. The full extent and related evolution of the settlement reaching into the floodplain is still largely unknown, but the drill-core survey and excavation at the later settlement situated at Kôm el-Gemuwia⁹² clearly show the presence of human settlement activity there dating back as far as the transitional

period between the end of Naqada I and the early Naqada II period.⁹³ Main factors influencing this shift from the low desert zone into the Nile Valley are related to changing environmental conditions such as drier conditions in the desert, lower Nile floods, and probably overexploitation of natural resources such as wood for industrial fires for pottery and food production. At the same time, an increase in social complexity can be witnessed – for example, by the elaborate Tomb 100, which was built with lined mud-brick walls and had painted decoration on one of its walls.⁹⁴ Further contributing factors – less visible from the archaeological data – might have been of political or strategic nature. The town became more nucleated but did not yet have an enclosure wall.

From the Naqada III period onward (ca. 3200–3100 BCE = Phase IV), ancient Nekhen developed into a major city in the form of a compact tell site within the floodplain at Kôm el-Gemuwia, while the desert zones were gradually being abandoned for settlement, although still being used for cemeteries (Figure 4.19).⁹⁵ By the Early Dynastic Period into the early Old Kingdom (ca. 3100–2700 BCE), no more settlement could be found in the desert, and all of the population concentrated inside a

walled city in the floodplain that is located about 360 m from the desert edge (Figure 4.18). It currently lies at 2 km west of the Nile, but there might have been a Nile branch or the Nile itself that once flowed much closer to the town in ancient times. A recent drill core that was taken west of the Pharaonic townsite of Nekhen has provided some evidence for a Nile channel running west of the ancient town during the early Predynastic Period that was silted up already by the Early Dynastic Period, when this channel was migrating eastward.⁹⁶ The width of the fertile valley in this region lies at around 4 km, making it one of the larger valley stretches in the south. From the votive objects and a palace-like building complex (see details following), it is possible to deduce the continued importance of the city for early rulers of the First and Second Dynasties. Especially prominent names associated with the city of Nekhen are Narmer, Scorpion, and Khasekhemwy.

It has been suggested that the site declined considerably during the later Old Kingdom, with activity concentrating around the temple site. This last phase in the suggested development – termed Phase V, Provincialization, ca. 3100 to 2230 BCE (Early Dynastic–Old Kingdom, Dynasties 1–6) by Hoffman – covers about 800 years, which can be divided into various subphases, the Early Dynastic period (Dynasties 1 and 2) being one of them (Figure 4.19). From the archaeological reports of the excavations at the site, it is clear that extensive seabkh digging had removed all the upper layers of the tell site, leaving intact only remains from the Old Kingdom and earlier. It is therefore very difficult to make any firm conclusions about the state of the settlement during the final phase in the development of settlement at Hierakonpolis as established by Hoffman. Archaeological evidence dating to the post-Fourth Dynasty era is severely disturbed and in many areas completely removed.⁹⁷ In the temple, several objects of the Sixth Dynasty were found in pits of buried votive objects.⁹⁸ According to the current state of research, it is not possible to draw any more conclusions about the development of Nekhen after the Fourth Dynasty (ca. 2500 BCE), and Hoffman's suggestion of a decline remains questionable.

The gradual shift toward the floodplain that led to the rise of a more compacted settlement is the result of one of the later stages of development within a very dynamic region but is also part of a much larger phenomenon that has been observed elsewhere – for example, at the site of Naqada further north, which seems to mirror the situation at Hierakonpolis.⁹⁹ From at least the Third Dynasty

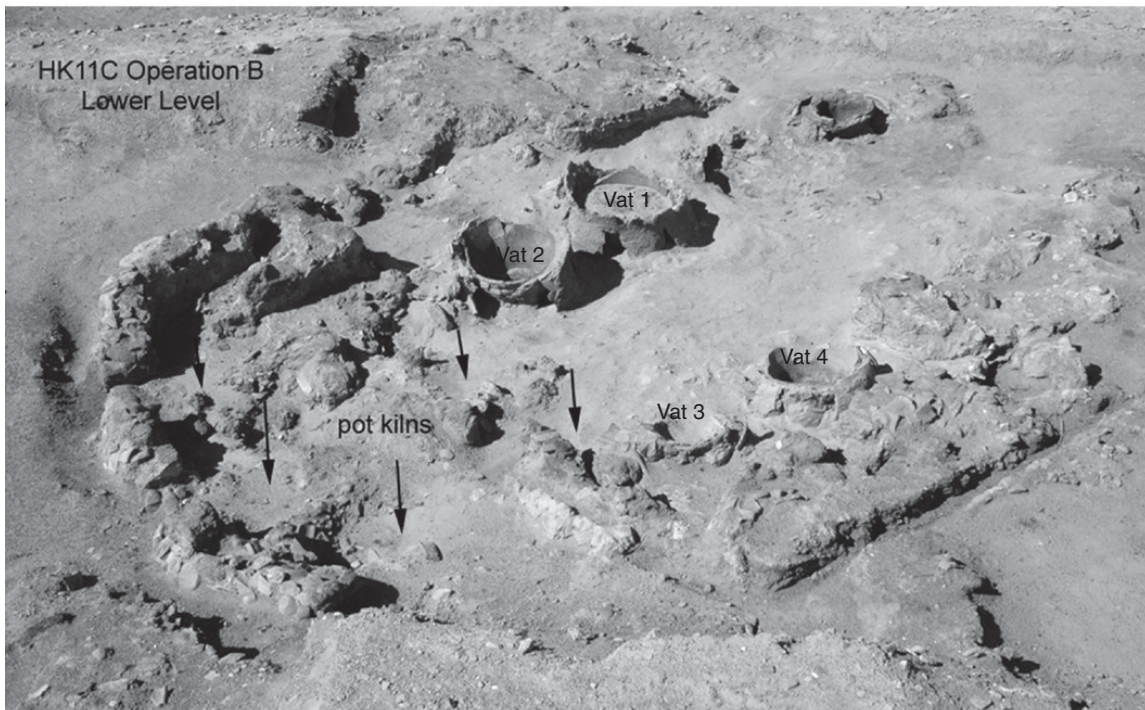
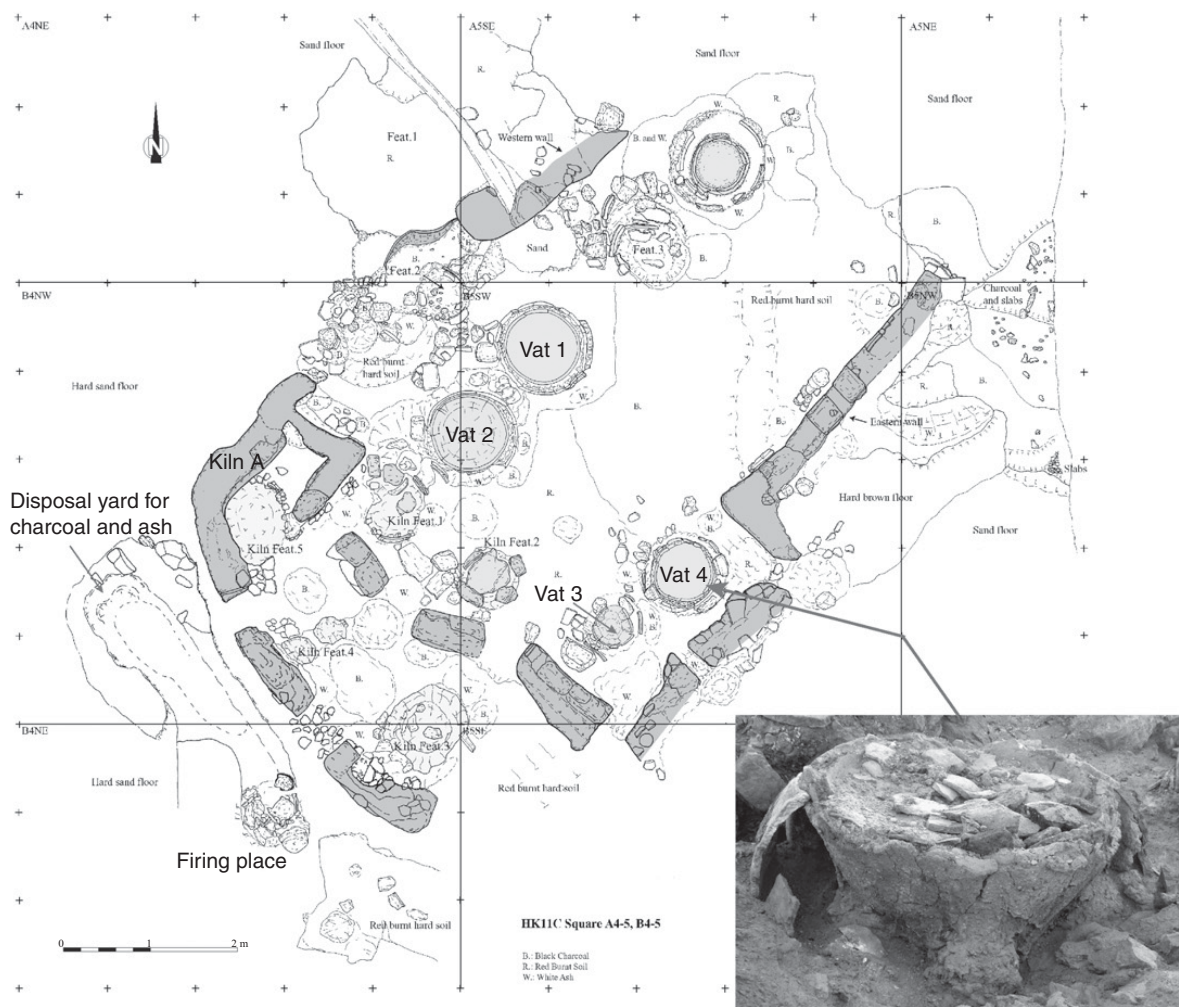
onward, ancient Nekhen, the city of the Falcon god Horus, functioned as the capital of the third Upper Egyptian nome. Across the river lies its twin city, Elkab, ancient Nekheb (Figure 4.1), an early urban center of comparable importance, but one where the archaeological remains have been preserved rather poorly.¹⁰⁰ Satellite images of this part of the Nile Valley show that Hierakonpolis and Elkab are lying exactly opposite each other, probably once adding much control and interaction to river traffic. Evidence for a gradual shift of the Nile eastward can be seen at Elkab from the erosion of parts of the remarkable Late Period enclosure wall still surrounding much of the ancient city and functioning today as a visible landmark.

After having outlined the main phases of development at Hierakonpolis, it is important to investigate some of these phases in more depth in order to establish the various characteristics that define the emergence of early urban society in Upper Egypt. As mentioned previously, Hierakonpolis is one of the rare sites currently published that can be traced back to the early Predynastic period, which helps to establish the origins of numerous components that become typical for later urban centers.

4.3.1.1 *The wadi sites of the early Predynastic Period (Naqada I-IIA/B period, ca. 3800/3700–3500/3400 BCE)*

The identified sites of settlement activity fall into two main zones: one located along the Wadi Abu Suffian and the other along the flat desert edge close to the floodplain, with possible outliers reaching into the floodplain itself (see Figure 4.19). This phase of development shows the first signs of large-scale craft specialization in both zones.

At locality HK 11C, a large, industrial-scale pottery workshop with attached brewery was discovered and excavated recently (Figure 4.20).¹⁰¹ The wadi environment during the early Predynastic Period supported a vegetation of tamarisk and acacia trees, providing fuel and also allowing for the existence of seasonal herding. Apart from these production and habitation sites, several smaller outliers of human settlement activity have been noted in the surrounding area along the wadi – such as the round stone huts at HK 3 and possibly remains of a small homestead at HK 5 (Figure 4.18). Evidence for trash disposal from a community living in this area was found at HK 60.¹⁰² Hoffman suggested that these installations and settlements were linked to the exploitation of seasonal pasturages of the wadi zone.¹⁰³ One further aspect playing an important role that might actually challenge



4.20. Brewing facility and pottery kilns at HK 11C – Square B5 (Naqada IC and IIB period) at Hierakonpolis. Plan by M. Baba, provided courtesy of the Hierakonpolis Expedition.

some of these identifications as to the nature and role of settlement here is the presence at HK 6 of a large and important elite cemetery whose full significance has only recently been better understood.¹⁰⁴ This was a place where early chiefs or local rulers were buried, and the site remained a place of veneration for generations to come.¹⁰⁵ From the current archaeological evidence it is clear that much of the settlement activity was closely related to the cemeteries at the wadi, and specifically the exceptional elite cemetery at HK 6 (Figure 4.18).¹⁰⁶ This connection evokes the possibility that the production facilities were exclusively supplying the cemetery with goods related to a kind of mortuary cult and operated only on a seasonal basis.

One additional observation that deserves attention on a more general level is the fact that pottery production sites often also included food-producing facilities – for example, for beer brewing, which can be identified from remains of large brewing vats on the ground. This is not a phenomenon restricted to the installations discovered along the wadi, because brewing facilities have also been found at other locations in Hierakonpolis. Traces of brewing activity have been noted at other kiln sites: one is the large production complex encompassing localities HK 24A–B and 25D, and another concerns a house and workshop area at HK 29 (Figures 4.18 and 4.21).¹⁰⁷

These discoveries certainly show the existence of specialized production sites, which seem to be present within the wider settlement zone but are also found close to the elite cemetery in the wadi area. There does not appear to be a noticeable difference in size or layout of these production areas, whether they were supplying the settlement or the cemetery, except for the fact that the production facility linked to the cemetery functioned on a more intermittent basis. It is possible to note an intrinsic connection between brewery and pottery production, possibly related to practical concerns such as the manufacturing of vessels, which were then filled with beer. This interpretation seems to fit the evidence from the brewery installations at the settlement, but new evidence from HK 11C shows that although the production of pottery and beer occurred in the same area, the vessels there were not used as receptacles for the beer but instead were items produced exclusively as burial goods.¹⁰⁸ It is therefore plausible that production facilities of different kinds of goods were grouped together according to more practical considerations, such as having ovens in the same area, which made it easier for the transportation of

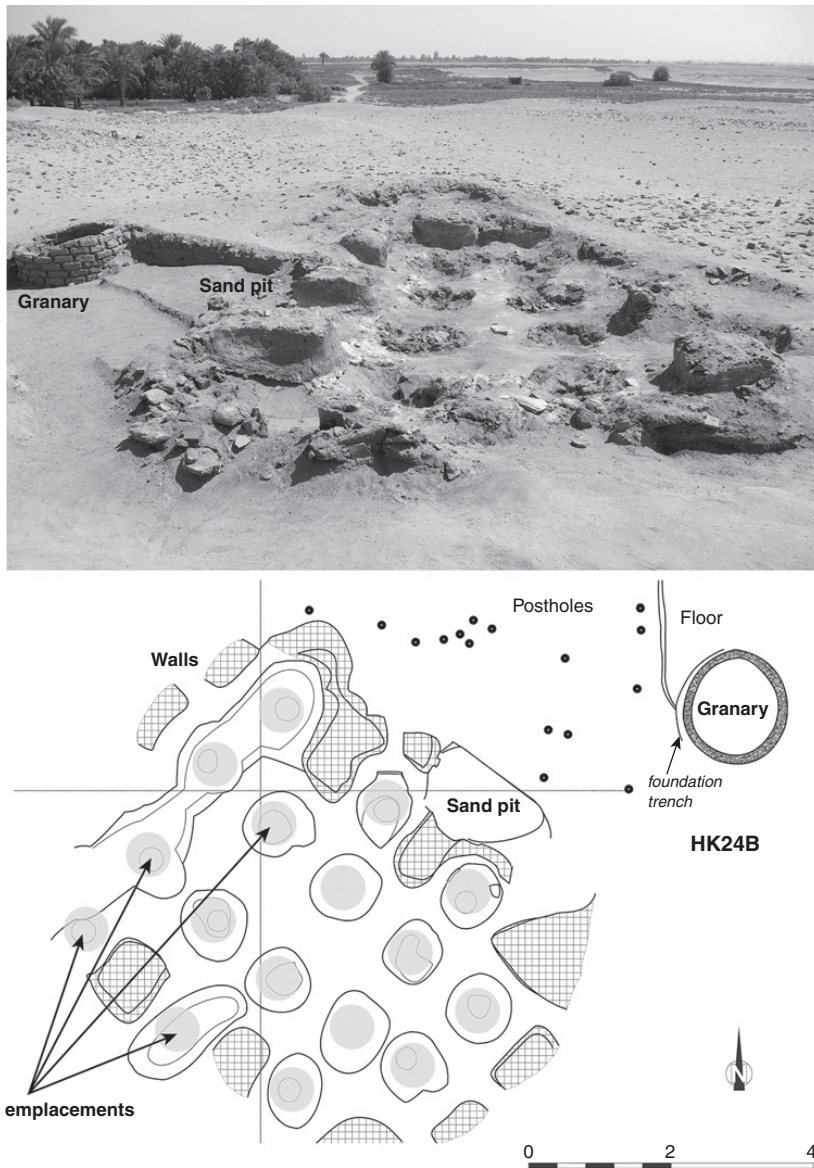
firewood or the common use of ovens for different types of production.

4.3.1.2 *The low-desert settlement near the floodplain of the early Predynastic Period (Naqada IC–IIA/B, ca. 3800/700–3500/400 BCE)*

The largest Predynastic settlement cluster extended into the low desert zone near the floodplain (Figure 4.19). Today the whole area is characterized by heaps of pottery sherds and holes in the sand, giving it the appearance of a severely eroded and disturbed site.¹⁰⁹ Nevertheless, the results from surveys as well as excavations in selected areas provide a glimpse of the architectural features and general layout of this settlement and also give an insight into its overall organization.¹¹⁰ There is evidence for production areas, a religious center, domestic areas, and various other special-purpose installations such as the buildings at the so-called stone mounds.¹¹¹

To the east of the Second Dynasty mud-brick “fort” of Khasekhemwy, evidence for a large-scale production area belonging to the early Predynastic town has been identified (Figure 4.18). It consists of several components: HK 24 A and B were breweries, HK 25D a bread-making facility with ovens, and probably all of these localities are outliers of HK 24, an area characterized by the dense accumulation of pottery sherds stemming from a workshop. The close link between these installations can be explained by the fact that evidence for bread making and beer brewing – activities surrounding the two staples of the ancient Egyptian diet – can be found together because bread was needed for making beer.¹¹² The proximity of these two facilities to the pottery workshop is probably also linked to practical concerns as, suggested previously for similar installations found along Wadi Abu Suffian.

Apart from the fact that it is possible to see a distinct internal organization within this large settlement according to different settlement quarters, the inhabitants working at this production site situated along the northern limit of the town were probably full-time specialists who received support from other residents of the settlement. Fuel and grain were needed in large quantities for this kind of food and pottery production on an industrial scale, which might have necessitated and encouraged a certain division of labor. The archaeological remains of the installations also provide first evidence for the emergence of the redistributive system, with bread and beer as staple goods playing an important

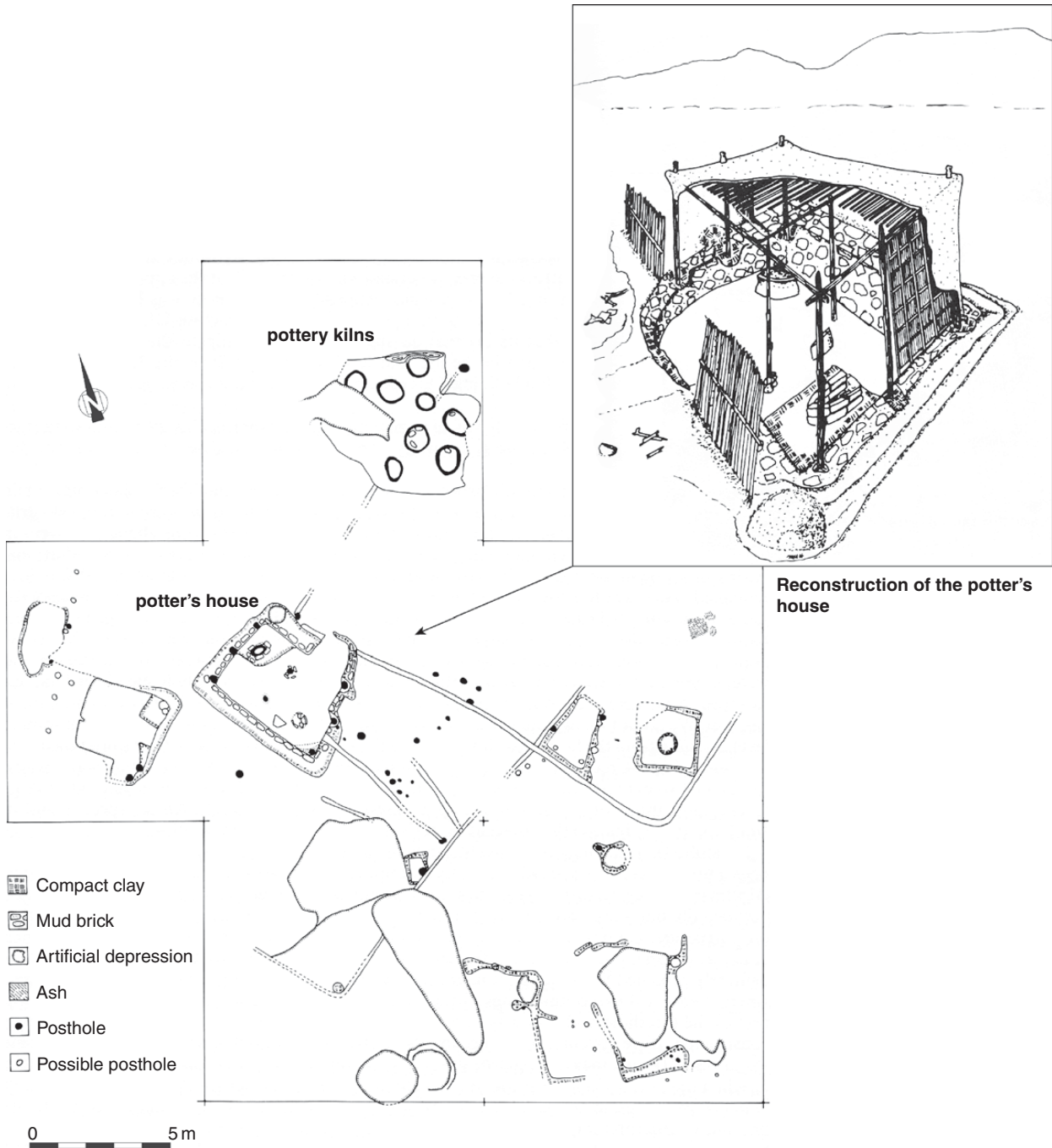


4.21. Food production installations at HK 24B (mid-Naqada I period) at Hierakonpolis. Photo by N. Shirai, and plan by I. Takamiya and N. Shirai, provided courtesy of the Hierakonpolis Expedition.

role within the economic system.¹¹³ The location of the industrial quarter along the northern margins of the larger settlement area was probably a deliberate choice because of the fumes and smokes from the ovens and kilns, but it was also more convenient for trash disposal and expansion if needed.

At the southwestern edge of the desert-zone settlement, several buildings and associated structures have been excavated at locality HK 29, an area of about 1.7 ha and one the best-studied areas of the early Predynastic town (see Figure 4.22).¹¹⁴ Two principal occupation phases can be

distinguished, of which Phase I dates to the very early Naqada IIA period, while the second, later phase (II) is badly disturbed and dates to about 100 years later.¹¹⁵ The first phase of occupation is characterized by several rectangular, semisubterranean buildings with light walls made in wattle-and-daub technique. Reed fences served as demarcations for larger yard-like areas, giving the settlement a rather loose organization with much open space around each area (Figure 4.22). A kiln consisting of eight shallow pits and measuring 6.1 m by 5 m was discovered at about 5 m northeast to the main house. It had been used for the



4.22. Plan of Phase I at HK 29 (Naqada IIA period) at Hierakonpolis. By G. Marouard, after M. A. Hoffman, "A Rectangular Amratian House from Hierakonpolis and Its Significance for Predynastic Research," *JNES* 39 (1980), 132, fig. 12, and M. A. Hoffman, "The Predynastic of Hierakonpolis – An Interim Report," *Egyptian Studies Association* 1, 1982, Cairo, 11, fig. 1.2.

production of straw-tempered rough-ware pottery, exploiting a nearby clay source. Close to the kiln, remnants of several pottery basins were found that had been originally supported by firedogs – very similar to the setup of the brewery complex at HK 11C.¹¹⁶ The presence of the vats

and firedogs near the kiln provides good evidence for yet another example of the coexistence of a pottery production facility and a brewery.

The semisubterranean house associated with the pottery kiln has been published in depth because it was the

best-preserved example at HK 29.¹¹⁷ It burnt down around 3650 BCE, resulting in an excellent preservation of the house and its related structures. The dwelling consists of a simple room, measuring 4 m by 3.5 m, and its floor was dug into the ground (45 cm to 80 cm deep), giving it a semisubterranean appearance. The walls were fortified and smoothed by adding a layer of mud plaster mixed with broken pieces of mud bricks against the interior sides of the lower part of the building, into which several wooden posts were inserted for the upper part of the walls, which were finished using the wattle-and-daub technique coated with mud plaster (Figure 4.22). Inside the building, a hearth was found in one of the corners and a storage jar of straw-tempered rough ware still in situ, dug into the floor of the opposite corner. A negative imprint of a further storage vessel was noted near the outside of the building.¹¹⁸ These installations within the house provide evidence for food preparation and storage belonging to a single household. However, the pottery kilns in the vicinity indicate that the owner of this small house might have been a potter and worked as a kind of specialist within the settlement. The analysis of the faunal and floral remains from this area shows evidence for the usual herding and agricultural activities most of the settlement's inhabitants were involved in.¹¹⁹ It is not possible according to the available evidence to discern in any more detail whether the potter of HK 29 was primarily a specialist and receiving supplies by others or whether he was also actively involved in agricultural work.

Further manufacturing areas clustered in the north-western part of HK 29 were noted for examples of stone objects, foremost the production of flint tools and blades for domestic and other manufacturing purposes. Also found were a few mace-heads, stone vessels, and palettes, which are considered luxury items.¹²⁰ This evidence points to the existence of certain areas used specifically for the production of various types of artifacts, utilitarian as well as decorative in character.

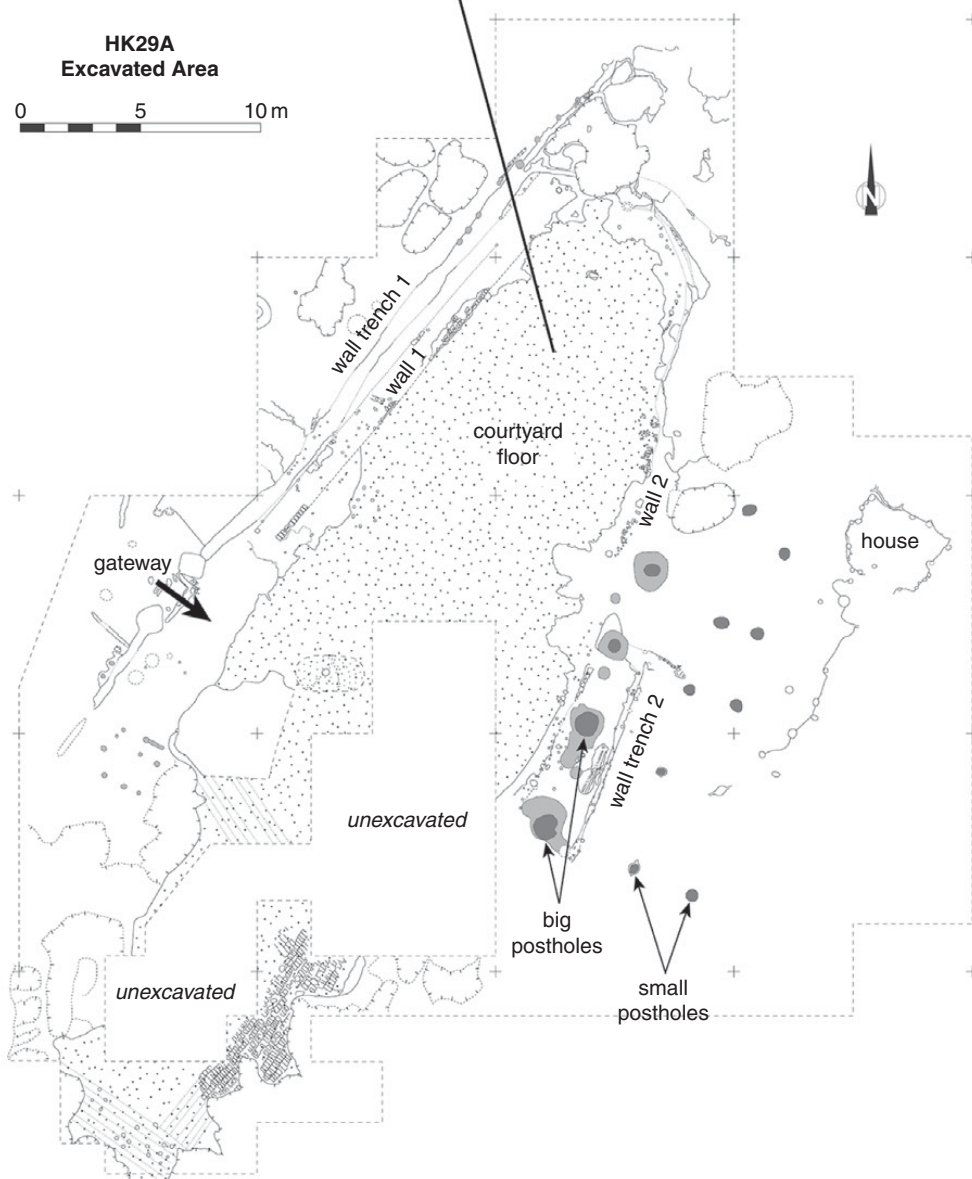
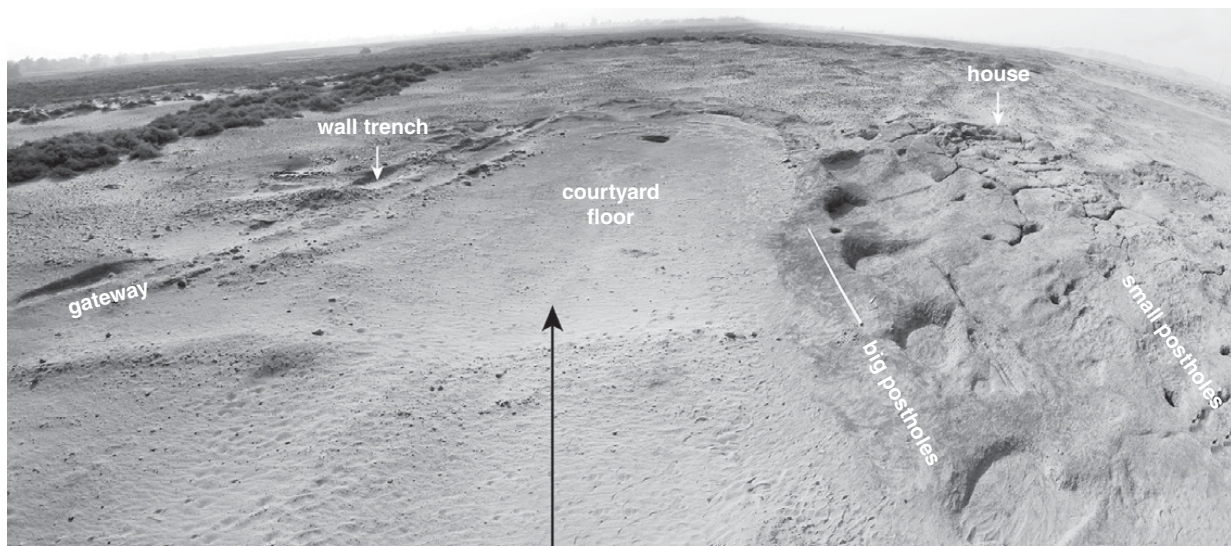
An additional matter of interest for this study is the evolution of the general organization in this part of the early Predynastic town. Whereas Phase I was characterized by a pattern of loosely arranged buildings and larger open areas, Phase II starts to show a much more dense arrangement of buildings using common walls.¹²¹ This latter phase already consists of some elements that become increasingly frequent during late Predynastic and Early Dynastic periods at Hierakonpolis.

In conclusion, it is possible to state that the early Predynastic town dating to the period between 3800

and 3500 BCE spread between the low desert area and the wadis over an extensive zone covering more than 36 ha, which in fact constitutes the largest phase of settlement here.¹²² It is characterized by a relatively dense settlement of people making best use of the local environment and depending on a subsistence economy of cereal agriculture and animal herding. At the same time there is first evidence for distinct quarters marked by production and manufacturing facilities along the marginal zones of the town. The excavated finds show that Hierakonpolis was already integrated into a larger network of exchange, witnessed by the presence of nonlocal raw materials.¹²³

*4.3.1.3 The evidence from the late Predynastic
Period settlement at Hierakonpolis (Naqada IIB–III,
ca. 3500–3200 BCE)*

The later Predynastic settlement underwent a process of nucleation and restructuring, resulting in a more compact form of settlement at the modern edge of cultivation (see Figure 4.19). It stretches for about 300 m along the desert edge, covering about 3.6 ha, but there is some evidence that parts of it might extend into the floodplain, where the ancient remains would now be covered by thick layers of alluvium.¹²⁴ Hoffman refers to changes in the environment and climate that affected the inhabitants and led to this marked shift in the settlement toward the floodplain.¹²⁵ Instead of the widespread, relatively open and dispersed character of the earlier settlement that covered a much larger area, the late Naqada II–period town shows increased density. Certain new urban elements can be recognized in the archaeological record. Evidence for an early ceremonial center has been discovered to the east of HK 29, at the locality called HK 29A (Figure 4.18).¹²⁶ The main feature of this structure is a large oval courtyard about 40 m long and 12 m wide, made of a thick mud floor and surrounded by thin mud-brick walls and wooden fences of which numerous postholes in the ground bear witness (Figure 4.23). It functioned from the late Naqada II to the beginning of the Naqada III period; a few traces dating to the First Dynasty have been found that constitute the last phase of use here. The limits of the courtyard had been marked by a perimeter wall, which in turn had been fronted by a wooden fence construction along its exterior; only the trench remains. Several refuse pits were excavated on the eastern side of the trench, bearing witness of possible ritual activities performed inside the courtyard.



4.23. Early ceremonial center at HK 29A (late Naqada II–early Naqada III period) at Hierakonpolis. Photo by R. Friedman, and plan by R. Friedman and L. McNamara, provided courtesy of the Hierakonpolis Expedition.

Two postholes on the northwestern side mark the entrance to the oval courtyard. On the opposite side, four very large postholes for cedarwood posts were excavated; these measured about 1.5 m in diameter.¹²⁷ Their exact function remains unknown, but for some time it had been assumed that they were for flagpoles standing in front of the shrine or sanctuary. However, recent reinvestigations in the area to the south of the postholes did not reveal any further traces of architectural remains except for two rows of four much smaller postholes that could have supported some light installations made of wood – maybe a kind of portico marking the entrance.¹²⁸ This strongly suggests that the ritual activities were performed within the oval courtyard in the open area and not within a covered building. The remnants of such activities seem to have been discarded in various pits and the wall trench along the exterior of the complex, which was filled with a large number of pottery sherds and faunal remains. The analysis of the faunal remains showed evidence for the presence of cattle and sheep/goat but also bones from wild species such as crocodiles, turtles, and large Nile perches. In addition, numerous flint tools have been found that provide evidence for the butchery of animals on site.¹²⁹

The area to the north of the ceremonial complex has also been the object of recent archaeological investigations. At HK 29B and HK 25, additional evidence for structures was found in the form of numerous postholes (Figure 4.8).¹³⁰ A long palisade (HK 29B) stretching over 50 m and showing the same orientation as the ceremonial center seems to have been an additional element belonging to this cult complex.¹³¹ At HK 25, which lies to the northeast, five rows of at least ten postholes have been excavated, indicating the existence of a kind of large “pillared hall” here with some parallels to the columned structures at the elite cemetery at HK 6, situated along Wadi Abu Suffian.¹³²

The unusual architectural features, in combination with the finds of material culture and faunal remains, provide good evidence for an early ceremonial center that saw continuous use over more than 200 years. Its architectural elements, especially the large cedar poles, prove wider-ranging trade and economic connections, already established during this time period. They are also first evidence for architectural features of monumental size. Locality 29A is good evidence for the transition to urban settlement toward the end of the fourth millennium BCE, and it falls precisely into the time period in which urban features began to appear in Upper and

Lower Egypt. While this early ceremonial center has no parallels at any other excavated settlement sites, its distinct architectural features (such as the oval courtyard and the four cedar posts) resemble images that can be found on decorative objects of the period (such as mace-heads or stone palettes as well as ivory tags with early writing).¹³³ It has been tentatively identified with the Upper Egyptian *pr-wr* shrine, known from First Dynasty sources as the most prominent cult center in the south.¹³⁴

Another building complex, which stands out from the rest of the late Predynastic settlement, is situated at HK 34B. Here a peculiar accumulation of stones was discovered lying on the summit of a small mound, which seems to have had a rectangular layout with a central courtyard.¹³⁵ Hoffman suggested that its prominent location on a mound in the center of a larger settlement as well its large size, covering about 1600 m² – in addition to the building material that was predominantly made up of stone – mark it as an important complex, probably of administrative or ceremonial character.¹³⁶ Another stone complex that has been dated a bit later, to the end of the Naqada III period, was detected at HK 15C (1) and has been termed “northern stone mound.” During the survey conducted at this locality, remnants of a large building were noted.¹³⁷ However, its bad state of preservation made it impossible for the archaeologists to distinguish individual rooms. Hoffman describes this structure as being a complex with thick walls and rooms organized in a “warren-like” fashion covering about 126 m².¹³⁸ Its precise purpose remains speculative, but its architecture indicates that it also served purposes other than primarily domestic functions.

Both of these stone constructions provide evidence for a certain variation and possible hierarchy among the buildings uncovered as part of the late Predynastic settlement along the desert edge. They fit into the development of increasing complexity and the presence of official buildings during this important time period that is marked by the emergence of urban features at the settlement of Hierakonpolis, which seems to reflect a more general trend in the wider region. The various elements and characteristics of the late Predynastic town allow a first evaluation of the “proto-urban” character of a settlement situated along the desert edge next to the floodplain and spreading over a considerable area. Distinct locations of specific settlement activity are recognized, with first evidence for monumental architecture that is witnessed, for example, at the early ceremonial center of HK 29A. Also important is the evidence for numerous

specialized production areas from the early Predynastic Period onward, in some cases reaching industrial scale and combining the production of various commodities close to each other – such as bread, beer, and pottery, but also luxury objects and utilitarian stone tools. Such facilities have been found along the marginal areas of the settlement. Their presence necessitated to some extent the development of specialists whose main occupation would have been to produce staple foods, pottery, and stone objects. They probably received some support by other groups of inhabitants who were more actively engaged in agriculture. In addition, there is evidence for the manufacturing of specific funerary goods (e.g., special types of pottery vessels) and the supply of offerings in the form of beer, which was destined primarily for the funerary cult at the elite cemetery HK 6 that has been discovered along the Wadi Abu Suffian.

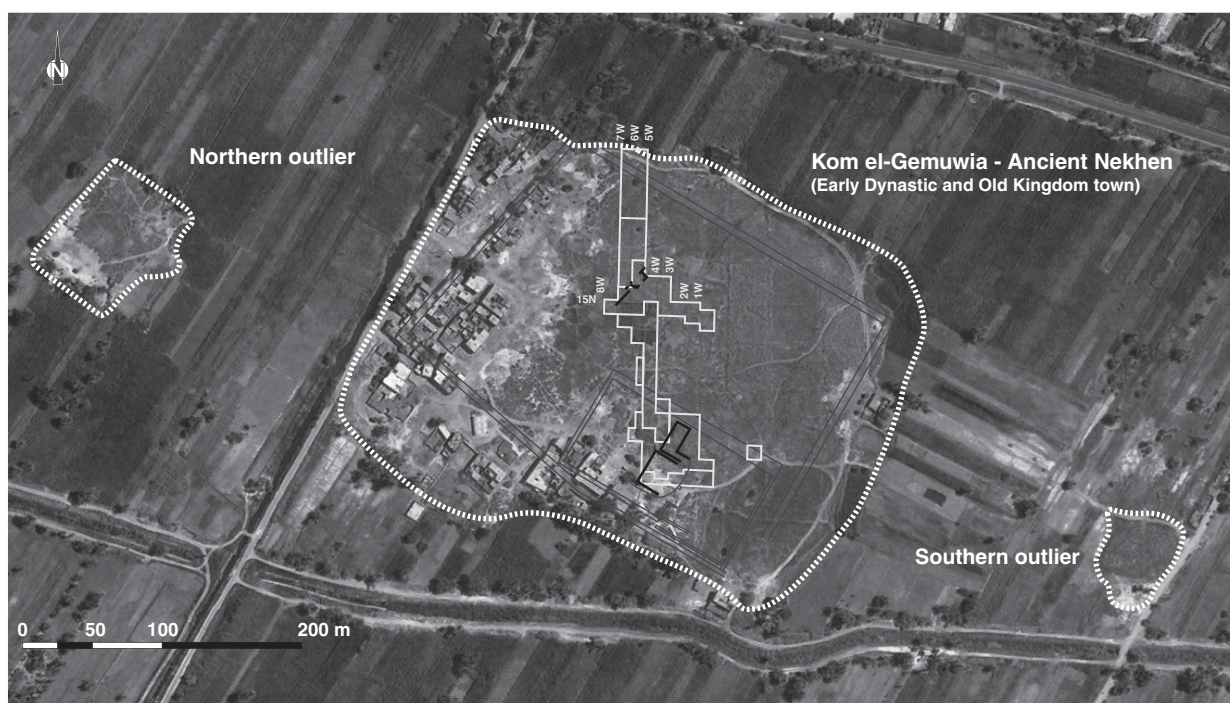
Around the main town, other sites of human settlement have been identified that were of more temporary nature – such as seasonal huts probably linked to herding and smaller hamlet-like installations.¹³⁹ The main difference that Hoffman has pointed out between the early Predynastic phase and the later one is the gradual development to a much denser and agglutinated form of

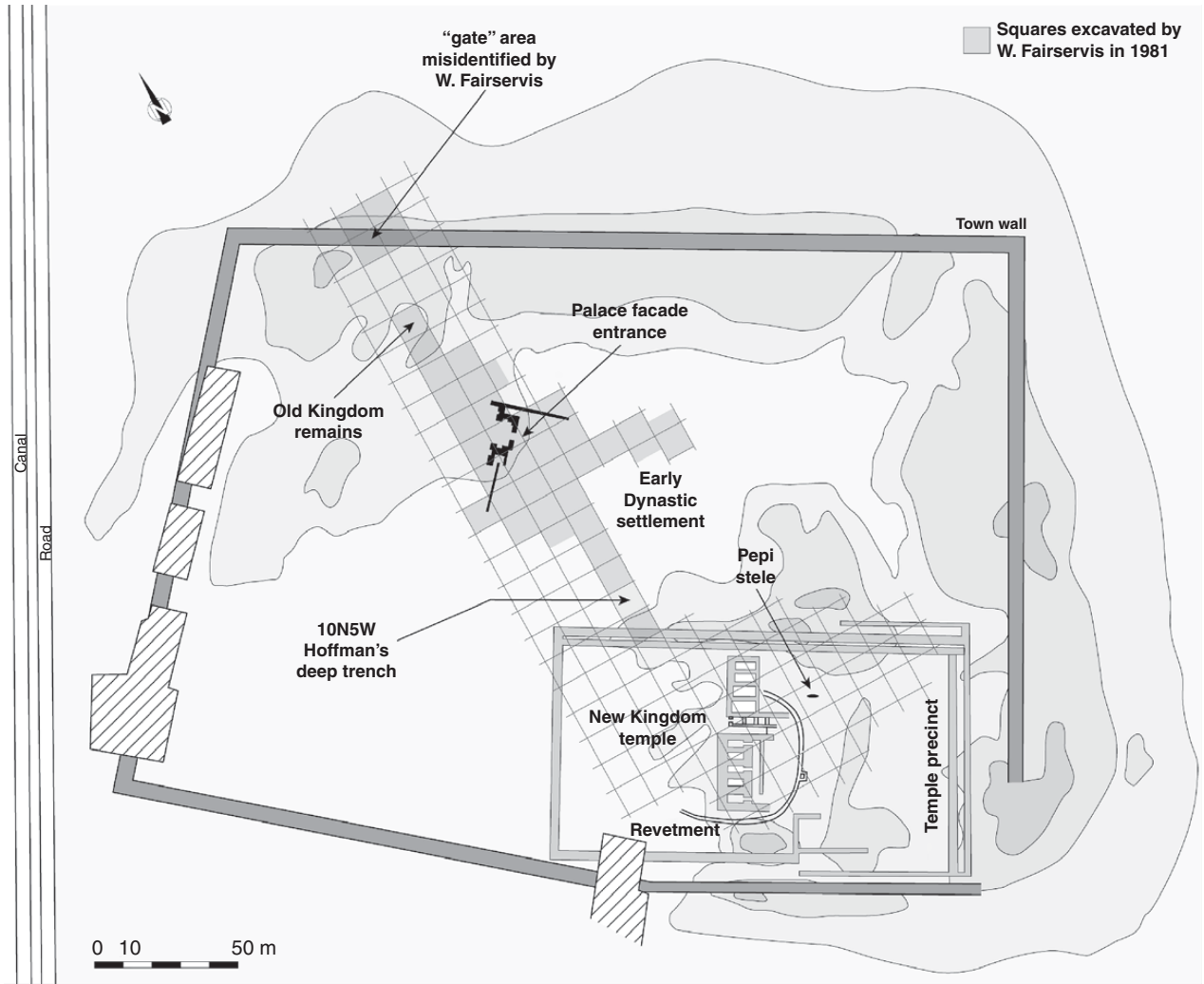
settlement toward the end of Naqada II/early Naqada III period, marking the beginning of the appearance of early urban features in settlements.¹⁴⁰ Hoffman cites mainly environmental causes for these changes, some of which are related to human overexploitation of natural resources, but there was also a marked shift in the climate to drier conditions and a reduced intensity of Nile floods that favored the shift closer toward the floodplain.

4.3.2 Ancient Nekhen – the city of the Early Dynastic Period in the floodplain

The remains of a tell settlement at Kôm el-Gemuwia provides evidence for a compact walled town and its temple, dating to the Early Dynastic Period and the Old Kingdom. The tell is currently situated at about 360 m east of the desert edge within the floodplain and was the ancient town of Nekhen from the Early Dynastic Period onward (Figures 4.18 and 4.24).¹⁴¹

The gradual movement of habitation toward the floodplain was to some extent influenced by long-term climatic changes in the region (lower, less erratic and destructive floods, drier conditions in the desert). Although this shift seems to a widespread phenomenon





4.25. Plan of the grid laid out by W. Fairservis at Kôm el-Gemuwia (ancient Nekhen) at Hierakonpolis. By G. Marouard, after W. Fairservis, *The Hierakonpolis Project. Season January to May 1981. Excavation on the Kôm el Gemuwia*, Poughkeepsie, NY 1986, fig. 1.

also observed elsewhere, it is important to emphasize that the deep trench dug in square 10N5W at Kôm el-Gemuwia shows clear evidence for settlement remains dating to the Predynastic Period underneath the later Pharaonic-period town (Figure 4.25). The various occupation phases and associated material culture provide a good chronological sequence that demonstrates that the later town of Nekhen at Kôm el-Gemuwia was not founded on virgin soil but seems to have been part of a continuous, long-term human occupation in this area. While these findings prove that some settlement in the floodplain existed at least from the Naqada II period onward, it is impossible to estimate the size and layout of the earliest settlement situated in the floodplain

and its relation to the larger Predynastic town along the desert edge.

Apart from the archaeological remains in square 10N5W at Kôm el-Gemuwia itself, some indication about the possible size of the settlement in the floodplain during Predynastic times comes from the presence of two small mounds or outliers that have been noted at 200 m and 300 m, respectively, to the east and west of the main town (Figure 4.24). Those two sites are still clearly visible on satellite images but have never received any in-depth investigation as to their date and nature.¹⁴² Frederick W. Green gave a brief description about the outliers, and it seems to confirm Predynastic–Early Dynastic activity there:

The little knoll seen to the S.E. of the town is an “outlier,” having been surrounded by the encroachment of the cultivation. In it were found several jars of the prehistoric or early historic period. . . . The upper part of the knoll is composed of rubbish thrown from a pottery kiln. Much pottery of the early dynasties, such as rough vases with pointed bases, and rough pot stands, were found here, as well as a great number of fragments, partly fused and distorted by heat.

On the N.W. side of the town is another outlier in which many fragments of prehistoric pottery and flint flakes were found.¹⁴³

With this brief description provided by Green, it is possible to assume that these two outliers were further elements in the floodplain that provide some evidence for an occupation parallel to the desert settlements. It also raises the question to what extent it is possible that those outliers had originally been connected to the actual townsite in the floodplain or the desert settlement, maybe as part of a loosely spread town or city.¹⁴⁴

The reason for the initial foundation of the Early Dynastic city of Nekhen in its current location within the floodplain is probably linked to two factors. There was an old wadi fan created by the large Wadi Abu Suffian that had led to the accumulation of a considerable amount of sand, creating some elevated ground. Nekhen might also have had convenient access to the Nile or a branch of the Nile flowing close to the site.¹⁴⁵

The site of ancient Nekhen in the floodplain at Kôm el-Gemuwia today is characterized by a low mound overgrown with halfa grass and a high groundwater level. In the past this site has seen several major excavations that not only brought to light objects of the Early Dynastic Period from the Main Deposit underneath a later temple construction but also parts of the actual Early Dynastic to Old Kingdom settlement. Although the temple was excavated first by Green and James E. Quibell at the end of the nineteenth century, they only investigated small parts of the actual settlement, which lies to the north of the temple.¹⁴⁶ Their excavations are famous for the spectacular discovery of key objects in the so-called Main Deposit, such as the Narmer Palette.¹⁴⁷

John Garstang continued the exploration of the temple and town in 1905/1906, but he only published some very preliminary results.¹⁴⁸ He excavated within the north-eastern corner of the main town wall, where he discovered remains of houses he dated to the Third Dynasty

according to the ceramic evidence, but not many details are known from his fieldwork.¹⁴⁹ Concerning the general preservation of the ancient town and its surroundings, it is worth mentioning the existence of early reports of looting by the local population in order to supply the antiquities dealers in Luxor. This seems to have concerned the town and temple after Quibell and Green’s work at the site in 1899 and Garstang’s brief intervention in 1905.¹⁵⁰ Other reports mention organized gangs looting sites and cemeteries of various periods along the Western Desert between Edfu and Hierakonpolis.

The main focus of excavations concerning the actual settlement at Kôm el-Gemuwia started during the fieldwork directed by Walter Fairservis, who dug at Hierakonpolis from 1967 to 1981.¹⁵¹ The results of this work provide some important insight into a part of the ancient townsite that dates to the Early Dynastic Period and early Old Kingdom.

4.3.2.1 *Excavation of the settlement at Kôm el-Gemuwia by W. Fairservis – enclosure walls*

Fairservis’s aim was to work his way through an established grid of 20 m × 20 m squares stretching from the town enclosure wall in the north to the temple enclosure (see Figure 4.25). As a starting point, he used the report by Quibell of the possible location of a gate along the northern edge (?) of the town mound, according to a depression visible on the surface. Fairservis started to excavate his first few squares in this area and was able to locate the remains of two town walls dating to different periods.¹⁵² The first enclosure (Wall A) had a thickness of 5.5 meters, to which a second wall (Wall B) was added on the outside, with a width of 2.5 m. A gap of 1.85 m separates the two.¹⁵³

Fairservis also noticed that on both sides of the earlier, larger Wall A, various mud-brick buildings were abutting it on both the exterior and interior sides, which he takes as sign of later settlement activity when the actual wall had lost its function.¹⁵⁴ The phenomenon of having mud-brick buildings leaning against the interior of an enclosure wall is fairly common for ancient Egyptian settlements.¹⁵⁵ Another observation is the presence of a buttress-like addition on the inside of the wall whose tentative identification as a buttress remains questionable.¹⁵⁶ The second wall (Wall B) was built later and shows some evidence for a decorative mud-brick pattern, possibly small niches, on its outside.¹⁵⁷

The “gate” area described by Quibell and Green turned out to be a larger break or gap between the walls

and is not a constructed gate. Fairservis did not immediately notice this, but he describes a “threshold” through the “gate” that was paved with mud bricks, and this pavement was to some extent bonded to the mud bricks of the enclosures.¹⁵⁸ The “pavement” constitutes lower brick levels of the enclosures, which were preserved although the upper levels had been destroyed, leaving a gap. His observation that the bricks of the pavement were bonded to the enclosures are good evidence for this explanation, and it seems that he had noticed his error in his last report, in which he mentions a “break between walls built at different periods.”¹⁵⁹

The later enclosure wall, Wall B, made use of the remains of the older one, which were still to some extent preserved at the time of the construction. This is an interesting observation because it implies that the new town wall was not necessarily enclosing a larger settlement area but took advantage of the remains of the older enclosure in order to reach a total width of 9.5 m. Concerning the chronology for both phases of enclosure walls, little evidence has been published.¹⁶⁰ It is hard to find much information about concrete dates for both walls in the first report published by Fairservis, in which he describes his investigation of the town wall in detail. However, in his last report about the fieldwork results from 1981, he states that the older enclosure Wall A dates to the Old Kingdom, while the second enclosure, Wall B, might be New Kingdom in date. The fact that the latter was built close to the Old Kingdom enclosure with the same orientation and following the same course indicates that it is quite likely that these two constructions were built with less of a time gap than Fairservis suggested.¹⁶¹ On a more general level concerning the Early Dynastic and early Old Kingdom phases of the ancient town, he notes that

The area just south of the Town Wall from the grid point 25 N-8W to a mid-point within quadrants 17N and 18N west of the Nighed Gate appears to be Old Kingdom in date. The ceramic evidence suggests early Old Kingdom or Late Archaic (=ED) (Fairservis 1971–71, figure 24). The more one moves northward towards the Town Wall, the greater the evidence ceramically for an Old Kingdom dating. This is also attested by the degree of the discontinuity of structures adjacent to the Archaic gate and those farther to the south (Fairservis 1971–72, figs. 12, 13). Even here, however, the orientation of newer walls still appears to

conform to that of the older. This is the case with most walls which represent the later occupations. (Fairservis 1986, 3)

Several further walls, which can be assigned to the category of enclosure walls according to their architecture and dimensions, were uncovered in other areas of the settlement site, but their precise function remains unclear because only a small area within the townsitewas excavated to a larger extent. A large wall, for example, was discovered in square 10N5W by Hoffman’s trench, but its precise function remains speculative. This square served as a test trench to investigate as deeply as possible the archaeological remains at Kôm el-Gemuwia, excavating underneath groundwater level in order to establish the earliest settlement remains here.¹⁶² Due to technical difficulties, the natural bedrock void of any material culture was not reached, but with the help of two drill cores and a deep sondage, the chronological framework was established, with the oldest objects in form of ceramics dating back to the early Naqada I period and the architectural remains dating later, to the end of the Naqada II period.¹⁶³ Next to a wattle-and-daub structure of domestic character – which is characterized on the ground by postholes and thin trenches as well as two superimposed mud-floor levels representing two phases of use with evidence for various activities that can be inferred from the presence of an oven and clay-lined basins – a large mud-brick wall has been found.¹⁶⁴ This wall is about 3 m thick and has been interpreted as a “large town or palace wall.” Both structures, the domestic building and the large wall, seem to be contemporary and have been dated according to associated pottery to the transition between the end of Naqada II and the early Naqada III period.¹⁶⁵ The wall is certainly too thick for a domestic building, and its identification as some sort enclosure seems correct. However, it is not possible to draw any firm conclusion on whether the settlement was already enclosed by a town wall during this time – too little of it has been exposed. Various other functions for this wall are equally possible.¹⁶⁶ The main result of the excavations in square 10N5W is the confirmed presence of Predynastic settlement layers underneath the Early Dynastic and later town, but in order to investigate the nature and layout of the town during this time, and especially how it compares to the settlement along the desert edge, a much larger exposure of the archaeological remains would be needed.

The enclosure walls surrounding the temple area at Kôm el-Gemuwia that can be seen on most published

plans date to the later Pharaonic period (see [Figure 4.25](#)). The visible enclosure wall at the temple that is founded on the Early Dynastic floor level is most likely of Eighteenth Dynasty date and was probably rebuilt in parts during the Ramesside period.¹⁶⁷

This dating means that none of the visible temple enclosure walls are contemporary with the Early Dynastic occupation and the religious features of this time period are only known from buried cult objects such as those that have been found in the Main Deposit. The related architecture is much more difficult, if not impossible, to identify. Remains of a circular sand mound with a distinct stone revetment have been excavated underneath later temple structures. It seems to have functioned in relation with the earliest cultic activities carried out here, but its precise purpose and the nature of any additional architecture on top of the mound remain speculative.¹⁶⁸ The desert settlement dating to the early and late Predynastic Period did not show any signs for mud-brick enclosure walls.

4.3.2.2 *The Early Dynastic building complex with the “palace-façade gate”*

In the 1969 season at Hierakonpolis directed by Fairweather, a large gateway made of mud brick and showing a decorated exterior face with niches in the so-called palace-façade style was discovered. It is located about halfway between the New Kingdom temple enclosure and the Old Kingdom town wall in an area that should have been the heart of the settlement ([Figure 4.25](#)).¹⁶⁹ This discovery came as a big surprise, especially because palace-façade decoration had mainly been found in association with funerary or religious architecture up to that time (e.g., Saqqara mastabas, Abydos enclosures; see discussion at [Section 4.2.5](#), p. 76), which therefore has led to much discussion about the possible function of this building.

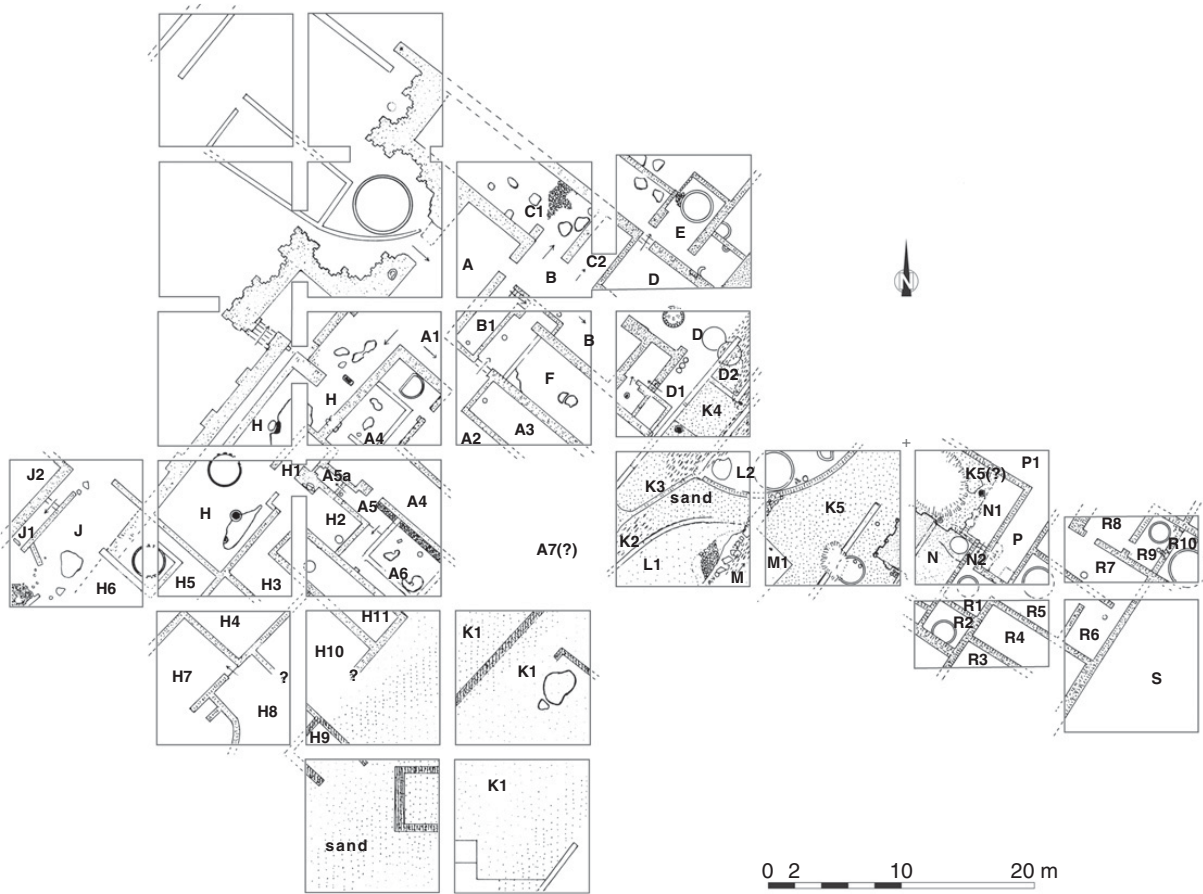
The largest exposure of archaeological remains was opened up around this feature, at the heart of Nekhen in squares 17N7W–17N6W–18N6W (see [Figure 4.26](#)). According to the ceramic evidence, it has been dated to the Early Dynastic Period.¹⁷⁰ This niched façade formed a sort of large gate, but the associated walls, which belong to the gate, have been difficult to identify. To the southwest runs a thicker mud-brick wall without any niching but with small buttresses at certain intervals ([Figures 4.26 and 4.27](#)). To the northeast, identification of any wall continuing in this direction has been difficult. Up to the discovery of the decorated mud-brick gate, all of the

niched mud-brick architecture that had been known was almost exclusively connected to funerary contexts. This example is the first found within a settlement. From the published plan and the description of the archaeological discoveries in this area, it is clear that the inside consists of a multitude of thin mud-brick walls forming interconnected rooms and smaller courtyards. No individual buildings or streets are distinguishable.

The features within the various rooms included fireplaces, storage installations in the form of small silos or bins,¹⁷¹ mud-plaster-lined pits, and sunken storage vessels in the ground. There is also some evidence for postholes and shallow negatives left in the floor from the deposit of pottery vessels.¹⁷² Little evidence points to anything other than domestic activities, but there are some exceptions that are noteworthy and one in particular that points to a building of official function. The [following section](#) discusses the installations and finds in this regard. It is necessary to review these features in more depth because they shed some light on the function of this building complex in the heart of the town.

4.3.2.3 *The niched gate*

The most striking feature is the gate area, which shows the palace-façade decoration on its exterior face (see [Figures 4.26 and 4.27](#)). The niched decoration marks a building complex of importance and potentially official character within the settlement. The opening of the gate itself has a width of about 2.8 m, while the thickness of the walls on both sides varies between 0.88 m and 1.9 m according to the niches. Its foundations were placed directly on a hardened mud surface without a foundation trench.¹⁷³ The exterior and interior wall surfaces show traces of a thick mud plaster, which was once painted white.¹⁷⁴ The reconstructed total height of the wall has been estimated at around 3.6 m. To the south of the gate with the niched decoration, the wall continues in a southwestern direction, but without indicating niches. Instead, square buttress-like protrusions had been added to the exterior face ([Figure 4.27](#)).¹⁷⁵ Here the wall is between 1.0 m and 1.4 m thick. Along the outer face of the wall, a well-prepared mud-brick floor was discovered that had been covered by a layer of mud plaster (*muna*) in its first phase. On top of this floor, remnants of a stone pavement consisting of smaller sandstone pieces were observed.¹⁷⁶ The northern continuation of the enclosure wall linked to the gate has been more difficult to identify. At first only a small wall stub (ca. 2 m long and 0.7 m wide) was found



4.26. Plan of the Early Dynastic building complex at Kôm el-Gemuwia. By G. Marouard, after W. Fairservis, *The Hierakonpolis Project. Season January to May 1981. Excavation on the Kôm el Gemuwia*, Poughkeepsie, NY, 1986.

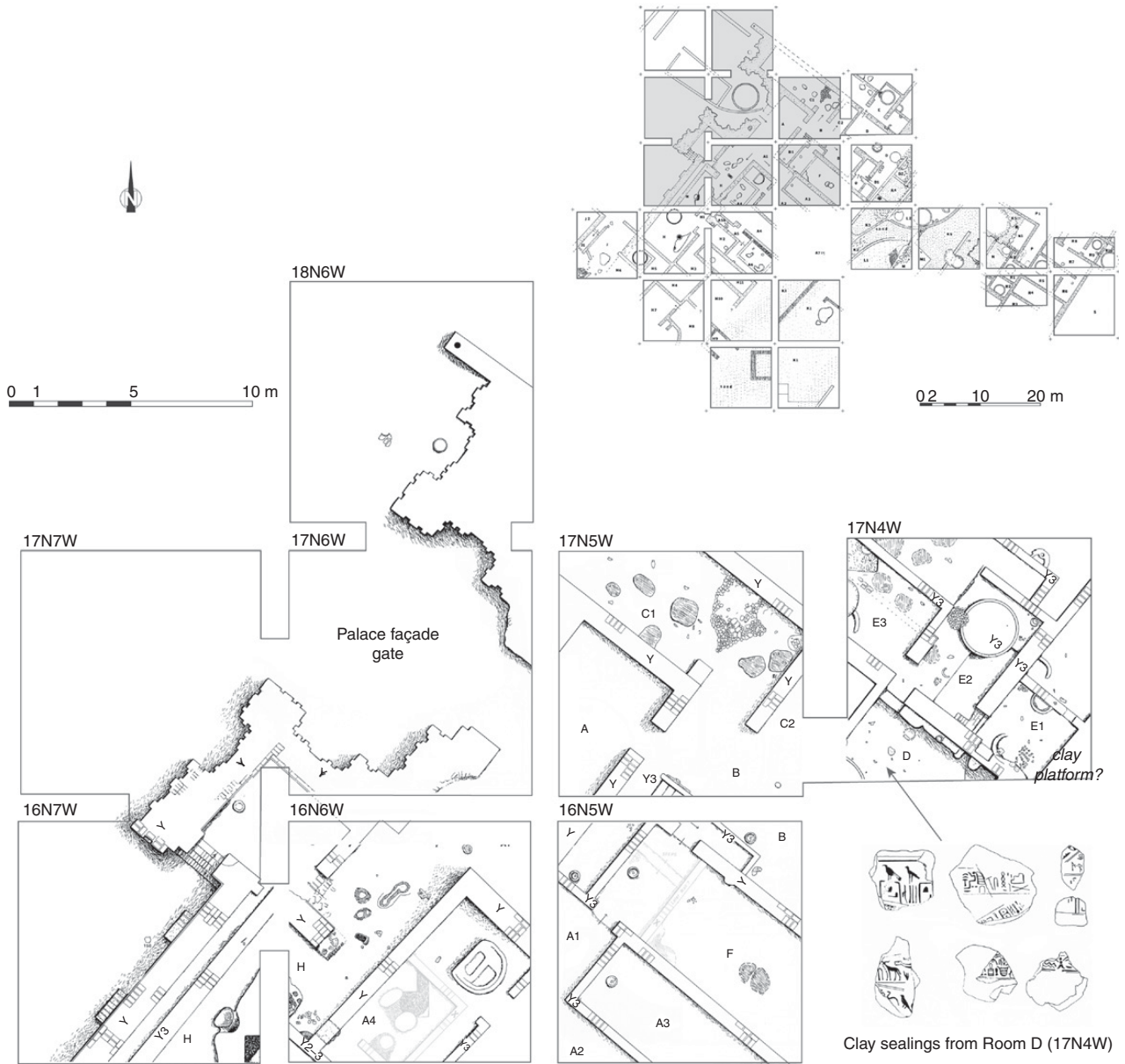
that is directly linked to the northern end of the palace-façade wall (Figure 4.27). A large posthole has been noted at the very end of this wall stub, and this hole might have held a kind of flagstaff according to the excavators. The wall stub seems to connect with another wall of identical dimensions that was found running in southeasterly direction (see Figure 4.26, square 17N4W). If that identification is correct, then the niched gate was situated at the northwestern corner of the building complex.¹⁷⁷

None of the walls that belong to the niched gate show any characteristics consistent with having been intended as a defensive wall (wall thickness, architecture). On the contrary, the palace-façade decoration and the small buttresses along the southern wall indicate a building of importance and are not part of a fortified enclosure wall.¹⁷⁸ Also noteworthy in terms of general structural observations is the fact that the excavated floor levels seem to gradually rise from the gate in a southern and eastern direction.¹⁷⁹

Even though the full extent of the enclosure wall with the niched gate is unknown, the archaeological evidence so far points to the gate being located at the northwestern corner of the complex. Close parallels for this location and also the architecture come from the Early Dynastic funerary enclosures at Abydos, where the remains of the northern gates of Djer, Peribsen, and Khasekhemwy show a striking resemblance to the gate at Hierakonpolis.¹⁸⁰ However, the latter gate area is part of an urban setting, in contrast to the Abydos examples, which are clearly of a funerary nature.

4.3.2.4 The interior layout of the palace-façade complex

The interior arrangement is characterized by a large number of interconnecting rooms and passages without the demarcation of any particular hierarchy. Apart from the expected objects and features associated with regular settlement activity – such as grinding stones, pottery, flint

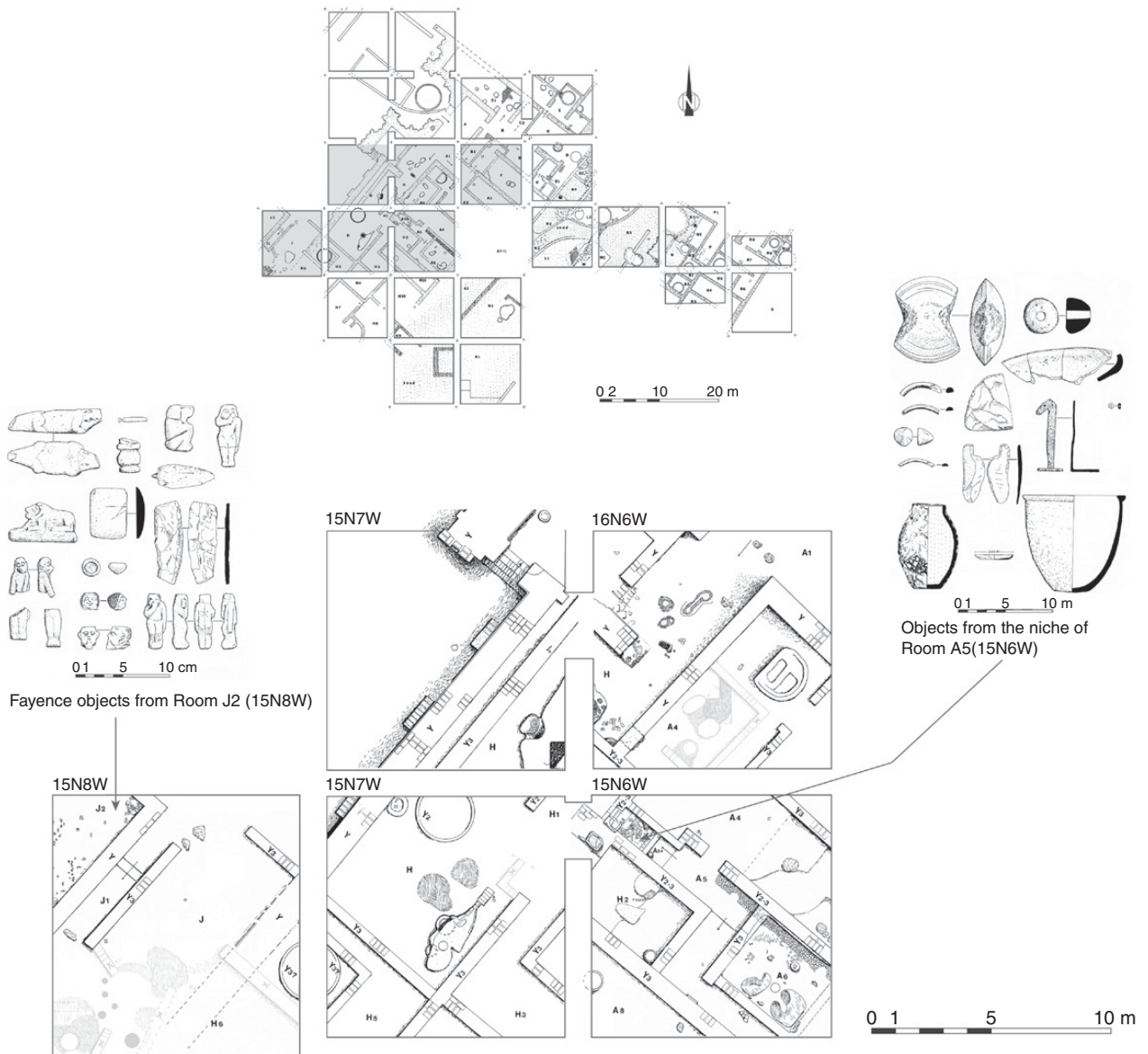


4.27. Detail of the palace-façade gate of the Early Dynastic building complex at Kôm el-Gemuwia. By G. Marouard, after W. Fairservis, *The Hierakonpolis Project. Season January to May 1981. Excavation on the Kôm el Gemuwia*, Poughkeepsie, NY, 1986.

tools, fireplaces, and round storage installations—several areas stand out and have the potential to reveal more about the function of this building complex.

In squares 15N3W and 15N2W and at a distance of about 40 m southeast of the palace-façade gate, in what should be the inner heart of the building, a large mud-brick platform has been found that also showed a niched or buttress-like decoration along its base.¹⁸¹ This platform lies in the direct axis of the palace-façade gate, which is important evidence for its official and

representational character (see Figure 4.30). There are several segments of this platform (N and N1; see Figure 4.30), which are separated by thin mud-brick walls and linked via doorways on the south to room N2.¹⁸² The most prominent platform part (N) is about 4.2 m long and 4.7 m deep, while the slightly smaller part situated to its northeast side (N1) is 4 m long and 2.2 m deep. Its face was decorated by a simple niche pattern, and several postholes on top of the platform might have held flagstaffs (Figure 4.30).¹⁸³

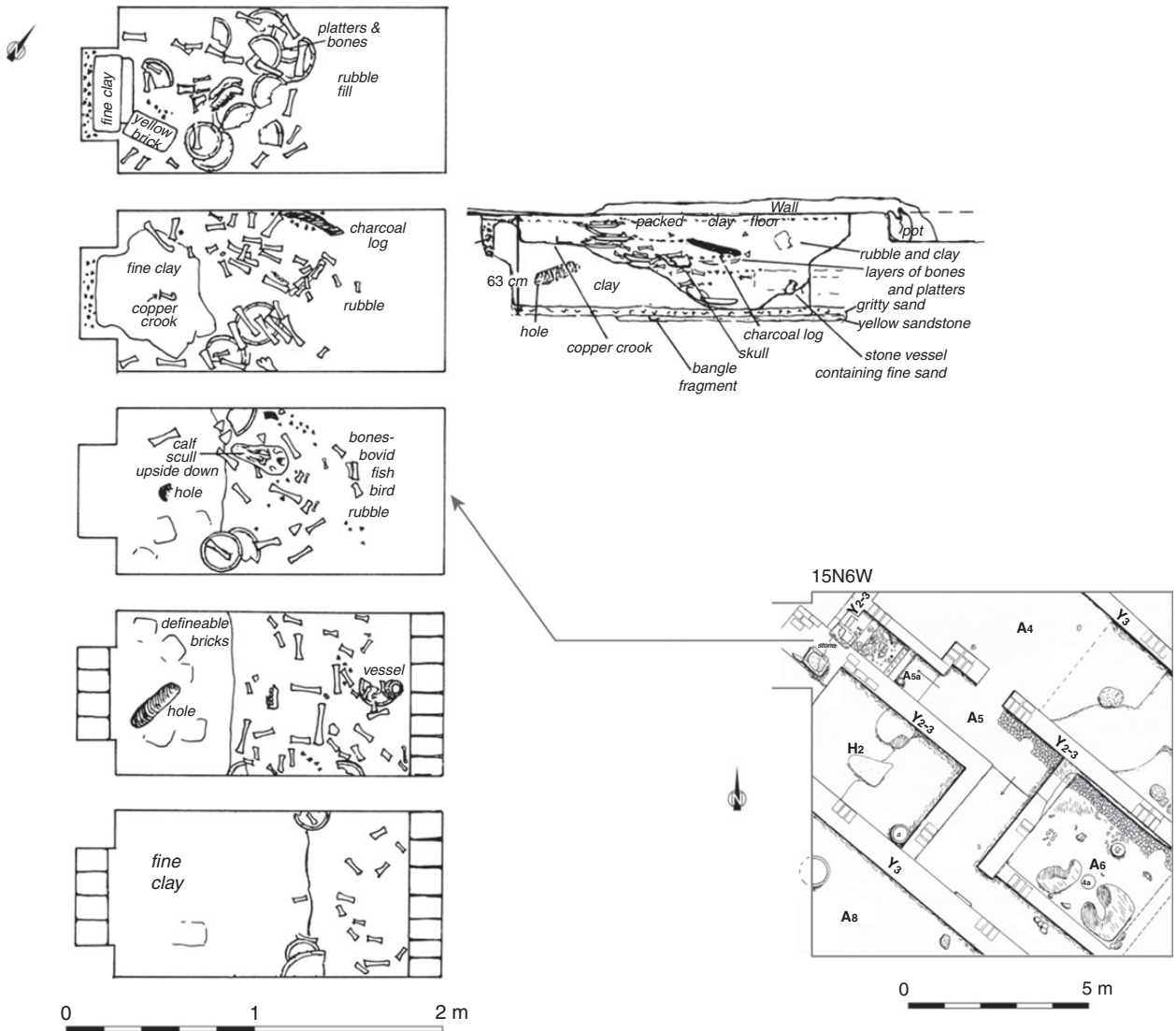


4.28. Detail of the Early Dynastic building complex at Kôm el-Gemuwia. By G. Marouard, after W. Fairservis, *The Hierakonpolis Project. Season January to May 1981. Excavation on the Kôm el Gemuwia*, Poughkeepsie, NY, 1986.

A corridor-like room (N2) at the rear of the platform gave access to the adjacent rooms, which according to the reconstruction are all at the same elevation.¹⁸⁴ About four rooms show round silos at their centers, and therefore the platform installation has been interpreted in the context of a large storage facility. It is not clear, though, whether the silos and some of the thin partition walls were part of the original layout or later additions to it, which is, for example, suggested by the fact that some of these round silos are constructed in the center of passages leading from one room to another (see Figure 4.30, R1). As the current

evidence stands, it is quite likely that the round silos are later additions and do not belong to the original layout of the platform.

Fairservis suggested that the platform might have been some sort of “loading ramp” in connection with administrative activity, which he relates to the presence of the silos.¹⁸⁵ The whole platform installation certainly does not resemble any regular domestic structure, and its niched decoration indicates some official purpose, which is further emphasized by its location and orientation in relation to the palace-façade gate. The interpretation as a loading



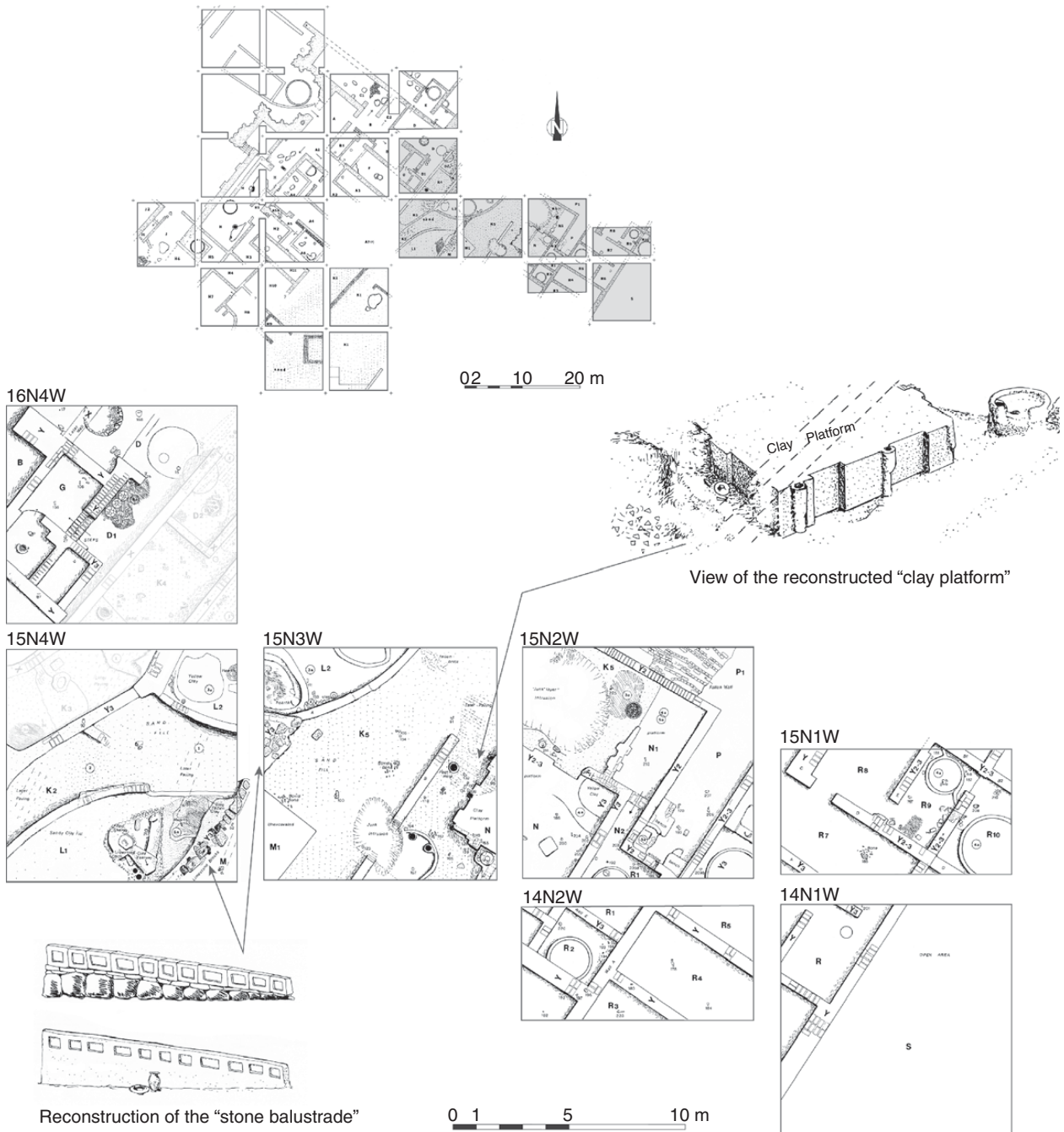
4.29. Stratigraphy of the deposit inside the niche of Room A5 (Square 15N6XW) at Kôm el-Gemuwia. By G. Marouard, after W. Fairservis, *The Hierakonpolis Project. Season January to May 1981. Excavation on the Kôm el Gemuwia*, Poughkeepsie, NY 1986, fig. 20.

ramp for a large storage facility is therefore quite unlikely. The architectural details indicate some official or representational function – for example, to inspect goods or receive audiences. Its link to administrative activity, however, also remains a good option, especially in comparison with later images of high officials inspecting the delivery of goods.¹⁸⁶

Additional evidence pointing to an official/representative character of the platform is seen in a stone balustrade or some kind of ramp, of which there are several elements remaining that seem to have been leading up to the platform construction and have been found at about 15 m southwest of it (Figure 4.30). The “ramp” was built of a lower layer of roughly cut sandstone blocks and

covered by thin sandstone slabs, which in turn were covered by well-cut rectangular limestone blocks showing recessed panels carved on their sides.¹⁸⁷ This peculiar stone structure runs parallel to both the platform and the niched gate and faces an open area or courtyard in front of the platform (see Figure 4.30).

Evidence for a small cult place was also found in the interior of this building complex (Figure 4.28, niche of room A5). A small niche enclosed on three sides by mud-brick walls was discovered at about 10 m south of the palace-façade gate in square 15N6 W.¹⁸⁸ Numerous layers associated with offering deposits consisting of various objects – foremost pottery vessels such as large trays



4.30. Detail of the “clay platform” area, Early Dynastic building complex at Kôm el-Gemuwia. By G. Marouard, after W. Fairervis, *The Hierakonpolis Project. Season January to May 1981. Excavation on the Kôm el Gemuwia*, Poughkeepsie, NY, 1986.

and a considerable amount of animal bones – were found here (see Figure 4.29). These finds are good evidence for the regular presentation of food offerings in this small shrine over some period of time, but it has not been possible to identify the recipient of the cult. There was also a complete absence of any small animal or human

figurines among the offerings, and these elements are typically found in the contexts of early shrines.¹⁸⁹ However, such figurines have been excavated in a different location at the site. Numerous examples were discovered in a building situated southeast of the palace-façade gate that has been identified as a faience

workshop.¹⁹⁰ Only the northwest corner of this building has been exposed, and it lies opposite the currently known southern end of the buttressed enclosure wall extending south of the palace-façade gate (see Figure 4.28, square 15N8W, room J2).

There is also some evidence for inscribed materials, notably in the form of broken clay sealing fragments, that provide good evidence for administrative activity having taken place in the palace-façade building complex. Several inscribed sealings were found in association with the floor of Room D (squares 17N4W and 16N4W; see Figure 4.27). This large room or courtyard lies about 12 m to the east of the niched gate and is characterized by the presence of a large circular hearth at its center.¹⁹¹ On its mud floor, seven pieces of broken sealings were found that come from jar stoppers.¹⁹² One of them shows the *serekh* with the name of Qa'a, last ruler of the First Dynasty (Figure 4.27, clay sealing no. 128). Three additional sealings were found in squares 17N7W–6W just outside of the niched gate and might be slightly later in date. Two of them were fragments of clay jar sealings showing cylinder seal impressions, while the third was probably a document sealing.¹⁹³

The sealings provide evidence for the official nature of this large building complex and suggest some links to the Early Dynastic rulers. Some of the structures outlined previously that lie within the interior of this complex provide additional support for its interpretation as an early palatial complex, possibly for a local/regional ruler or chief residing at Nekhen.

Although there is ample evidence for seemingly “domestic” activities such as food preparation areas witnessed by ovens and hearths, pottery, and storage installations, there is little doubt about the official and administrative component/function of this building. This observation is validated by the niched enclosure and elaborate gate but also by the presence of the platform in the center of the building. The arrangement of interlocking rooms leaves no possibility of identifying any smaller individual or self-contained structures within the complex; the whole layout seems to consist of an endless succession of small rooms, courtyards, and corridors that, however, excludes the notion that the palace-façade gate was in fact the first town wall of Nekhen. The discovery of the elaborately decorated gate area has led to speculations whether this complex could have been originally a religious structure and the interlocking mud-brick walls on the inside a later addition that was not related to the enclosure.¹⁹⁴ The evidence for the general stratigraphy of

the site presented by Fairservis in his reports is not necessarily ideal, but there is no reason to question the main lines of his analysis and associated chronology of the archaeological remains.¹⁹⁵ It is reasonable, then, to accept the contemporaneity of the palace-façade gate with the mud-brick walls on the inside. According to the finds and the architectural specifics of this building complex, the only plausible interpretation of its function lies in the official and administrative sphere, in addition to the evidence for residential use as witnessed by the storage installations and traces of food preparation and cooking. It should therefore be considered a secular building – probably a kind of “palace.”¹⁹⁶

Apart from its residential function, the platform installation in conjunction with the balustrade construction and the open courtyard in front of it, among other features, indicate that official business was dealt with in this building, which is further corroborated by the presence of clay sealings. The discovery of the small household shrine that does not display any formal features could be first evidence for a so-called ancestor cult that allowed for the veneration of deceased family members and acted as a point of communication between the living and the dead.¹⁹⁷ It is also possible that this palatial complex is an early example of the later governor’s palaces or residences that have been part of important provincial capitals and can be considered an urban feature.

Concerning the date of this complex, an Early Dynastic date seems likely with respect to the pottery evidence and the clay sealings.¹⁹⁸ In addition, excavations conducted below the platform revealed occupational layers dating to Naqada IIIB (= Dynasty 0), which can be considered a *terminus post quem* for the platform, making an Early Dynastic date for the latter a likely option.¹⁹⁹

The above-mentioned parallels of the entrance gate to the northern gates of several Early Dynastic funerary enclosures make a strong case for the Abydene enclosures being modeled on “palatial” complexes from settlement contexts. Specific architectural features and building styles that have their origins in settlement contexts were evidently transposed into the funerary and religious sphere.

The function of the palace-façade gate at Hierakonpolis as an enclosure demarcating an official administrative and residential building is a rare piece of evidence for this influence of urban constructions on funerary architecture. It is clear that the way archaeological evidence comes to be preserved has an enormous effect on the possibilities for deciphering such evidence. Very little is known about

these early townsites, whereas the structures belonging to the funerary sphere are often much better preserved due to their location in the desert and along the desert edge.

4.3.2.5 *Conclusions about the character of ancient Nekhen*

The archaeological finds from the excavations at Kôm el-Gemuwia provide good evidence for the presence of an important early urban center in Upper Egypt – one that already shows some of the principal elements that become typical for provincial capitals in the following periods. The Early Dynastic Period is certainly a formative time for the development of compact towns within the floodplain, which begin to exhibit urban elements such as a major temple and an important administrative complex that was possibly also an official elite residence for the local mayor or governor of the town. The palace-façade gate clearly sets apart a large building complex from the rest of the settlement. Some of its interior layout stands out, including that of the platform installations and the balustrade, whereas the overall arrangement of inter-connecting rooms, passages, and open areas does not seem to be in any way different from that of buildings on the exterior of the complex. A similar observation has been made at the Early Dynastic fortress at Elephantine, where the interior of the fortress does not show a different layout of buildings compared with those found within the settlement next to the fortress. In addition, a major system of streets, for example, does not seem to have developed in any formal way that would allow for the differentiation in the archaeological record of any main streets through the town with smaller side streets. Although it is difficult to compare some of the results from Hierakonpolis with those of other sites in Egypt simply because there is little information from Early Dynastic settlements available in general, some of the characteristics surrounding the agglutinated layouts without any clear infrastructure are also visible at Elephantine.

The large town enclosure wall at Kôm el-Gemuwia that is depicted on most plans of the site is of Old Kingdom date and therefore later than the palace-façade gate. However, according to the ceramic evidence, it appears that the last phase of occupation of the associated building complex continued into the early Old Kingdom.²⁰⁰ While the presence of an Old Kingdom town wall is evident, no town enclosure wall has been identified for the Early Dynastic town. The existence of such early town walls has so far been attested at Elephantine, where the fortress is gradually incorporated

into the settlement enclosed by fortified walls, as well as at Tell es-Sakan, a site considered an Egyptian outpost that was also surrounded by mud-brick fortifications. Whether this phenomenon is only restricted to settlements situated in the border regions is currently difficult to evaluate with any certainty.

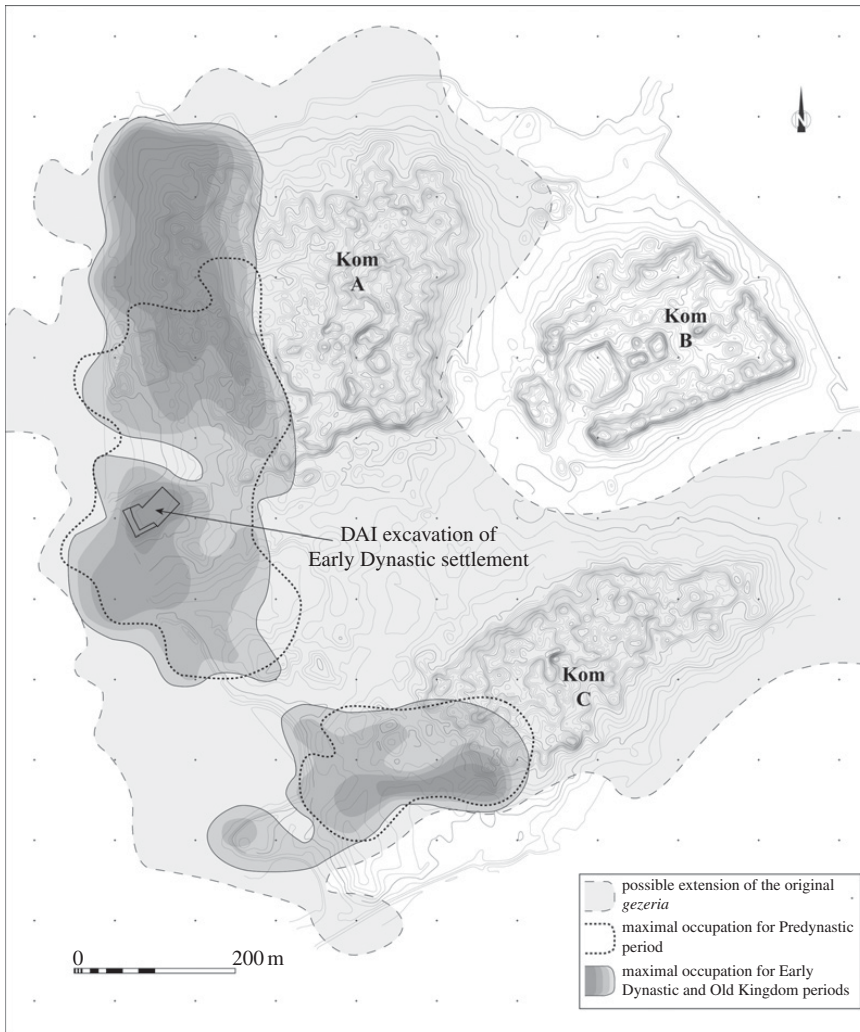
Equally important is the evidence for a major temple at the site of ancient Nekhen, which according to the finds of the Main Deposit was of national importance and closely connected with early kingship. Architecturally, little evidence has been found for it underneath later walls and remains of sanctuaries except for the so-called revetted mound, whose precise function remains unknown.²⁰¹

In conclusion, it is possible to state that the early settlements at Hierakonpolis not only provide much information about the origins of urban society in Egypt during the late Predynastic Period but also confirm that already during the first two dynasties, fully developed towns appeared in the Nile Valley. All the principal elements for a town of urban character are present at ancient Nekhen.

4.4 EVIDENCE FOR AN EARLY DYNASTIC BUILDING COMPLEX AT BUTO

4.4.1 The geographical setting

Archaeological settlement remains dating to the Early Dynastic Period have been found at the site of Buto, an impressive mound situated in the northwestern part of the Nile Delta. Today, the site lies about 40 km inland from the Mediterranean seashore. In 1999, the German Archaeological Institute in Cairo (DAIK), under the direction of Ulrich Hartung, conducted a thorough survey of the entire settlement, which encompasses an area of about 1 km².²⁰² Most of the archaeological remains that are visible today cluster around three mounds (Kôm A, B, and C) and are primarily of Ptolemaic and Roman date (Figure 4.31). However, the importance of Buto goes back much earlier – namely to the late Predynastic and Early Dynastic periods – which is also known from written sources. Buto can be identified with the twin cities of Pe and Dep, two toponyms abundantly attested on seals and sealings. It has been assumed that Buto had the role of the archaic capital of Lower Egypt during that time, thus a major center in the Delta.²⁰³ Finding archaeological evidence in order to confirm this status has been difficult because of the remains being deeply buried under



4.31. General plan of Buto and restitution of the possible limits of the occupation from the Predynastic Period to the Old Kingdom. By G. Marouard, after U. Hartung, et al., “Tell el-Fara’in – Buto. 10. Vorbericht,” *MDAIK* 65 (2007), 85, Abb. 1.

thick layers of alluvium and later settlements. An extensive drill-core survey at the site has shed some light on the location and evolution of the Predynastic and Early Dynastic settlement. Evidence for the earliest settlement activity of the so-called Buto-Maadi culture is mainly present in the southwestern part of the site, near the modern village of Sekhemawy. During the following Early Dynastic Period, this settlement spread farther to the north (Figure 4.31).²⁰⁴

The questions about the reality of Pe and Dep and what might be present in the archaeological evidence for these towns had already intrigued William M. Flinders Petrie in 1886.²⁰⁵ Petrie describes a visit to the site, joining Charles T. Curelly, who dug several trial pits at the townsite. Curelly mainly discovered Roman

settlement remains, but several Early Dynastic stone vessels were noticed, which made Petrie believe that there was a much earlier settlement somewhere underneath. There were only sporadic finds in the following fieldwork seasons under various directors, and it was not until the early 1980s that more-substantial evidence for an early town was uncovered. Werner Kaiser initiated the project, and the work continued for several seasons under the direction of Thomas von der Way. With the help of a drill-core survey, the presence of early settlement layers underneath the much later occupation was finally confirmed, and excavations then started along the western side of the tell. During this fieldwork, settlement layers of the Early Dynastic Period were discovered, centering on a large Early Dynastic building complex of official

nature.²⁰⁶ Farther below, settlement remains assigned to the Buto-Maadi cultural complex of the fourth millennium BCE were excavated.²⁰⁷ The excavations in this area were expanded when Hartung took over the direction of the project in 1999. He also conducted a successful drill-core survey covering the whole site, which led for the first time to a more in-depth understanding of the location, its nature, and its development from the earliest settlement dated at the fourth millennium BCE to the large city of Roman times, taking into account the changing environmental conditions.²⁰⁸

The earliest settlement at Buto was located along the western edge of a large Holocene dune ridge adjacent to a water channel, which was probably one of the Nile branches (Figure 4.31).²⁰⁹ Higher ground was sought for habitation because of the perennial inundation affecting the lower-lying ground. Later, during the Early Dynastic Period, the settlement area saw a considerable enlargement toward the north, while the river course remained unchanged in the immediate vicinity.²¹⁰ Important to note is the steady growth of the settlement deposits from 1 to 2 m in thickness during the Predynastic period to about 5 m by the Early Dynastic time. Apart from some sparse Old Kingdom evidence, nowhere on this large settlement site have any traces been discovered up to the present for Middle Kingdom or New Kingdom activity, which indicates a long phase of abandonment until the Third Intermediate Period.

4.4.2 The Early Dynastic building complex

The large building complex first discovered by von der Way has been excavated since 2000 in a more extensive way, with the aim of gathering additional data about the complete layout. The area was enlarged to about 1,500 m², including the earlier squares excavated by Hartung's predecessors. All of the mud-brick walls that have been dug in this part of the site belong to one large building complex, with a width of at least 58 m, extending for more than 45 m in a north-south direction, and also consisting of three or possibly four discrete areas resembling wide rows, each separated from the other by a thicker dividing wall (Figure 4.32). The arrangement of the larger internal dividing walls that separate the individual areas give the whole building complex a somewhat symmetrical layout.²¹¹

The central feature of the complex is a long corridor or courtyard of considerable width (4.8 m), flanked on the eastern and western sides by two larger mud-brick walls that are three courses wide, measure about 1 m in

thickness, and end to the south in a gate area flanked by two large protruding walls, each about 1.4 m to 1.6 m wide (see Figure 4.32).²¹² From there, continuing in a southern direction, the interior of the central part of the building in the form of a courtyard became accessible, which provided access to the western and eastern parts of the complex (see Figure 4.32, Areas 1 and 2). These two areas, which form the center of the building complex, are characterized by numerous small interconnecting rooms that follow a labyrinth-like layout and are flanked by long corridors on the eastern and western sides, respectively (Figure 4.32).

The southern enclosure wall limiting the whole building complex has been identified with some certainty, whereas the northern one remains unexcavated (see Figure 4.32). The overall layout suggests that it was to some extent carefully planned and not the result of consecutive additions in a random fashion. However, this does not exclude changes and additions to the initial plan of the internal rooms and walls, observable, for example, in the easternmost part (Area 3), which might have been transformed into magazines at some later time.²¹³

The internal architectural organization of the various rooms and corridors within the two central areas shows some striking features. The mud-brick walls have a thickness between 0.3 m and 0.6 m and join at right angles, with relatively precise orientation, to the cardinal points. Some of the rooms are arranged in such a way that they form interconnecting corridors in which the entrances are marked by slightly protruding doorjambs made of mud brick. These entrances face each other in the corridor-like passages.²¹⁴ No evidence for actual doors in form of thresholds or door sockets have been found in these passages, and it remains questionable whether they were ever closed. But there was certainly an organizing principle associated with these protruding doorjambs.²¹⁵ Unlike the doorways between the corridors, the doorways connecting individual rooms are never situated in a direct axis. Instead, they are deliberately placed at the opposite corners of the narrow sides of the rooms and are therefore offset so that any person passing through one room cannot easily see into the following one (see Figure 4.32).²¹⁶ These doorways and room arrangements take on a very complex form, which is further enhanced by the fact that the mud-brick walls were built at right angles to each other. However, the functions and purposes of these rooms and corridors have been difficult to establish because there is little evidence for any particular use or activities carried out inside them.



4.32. Early Dynastic building complex at Buto. By G. Marouard, after U. Hartung, “Der Fortgang der Untersuchungen am Tell von Buto: Ein ‘Berg’ an Informationen wartet auf die Entschlüsselung,” in G. Dreyer, D. Polz, *Begegnung mit der Vergangenheit – 100 Jahre in Ägypten*, Mainz am Rhein 2007, 65, Abb. 82.

In Area 1, one of the rooms contained a small deposit of about thirty clays sealings, with impressions left by cylinder seals that mention the names of several officials.²¹⁷ The presence of the sealings is a strong indication that part of this Early Dynastic building complex functioned as an administrative center. Some architectural details, such as evidence for stone thresholds and limestone door frames as well as the recurring traces of painted

wall plaster on the walls (large stripes of black, red, white, and yellow), indicate an official building, probably of palatial character. The structure would also have combined other aspects, such as being the residence for a high official and his household – a place where administrative tasks and significant storage would have been possible. Excavations in Area 3 revealed traces of the presence of a stone workshop and manufacturing facility in a first phase

of use. These were then transformed into a large storage magazine tract, signifying the function as a centralized facility receiving goods from a wider region, maybe in the form of taxes that were collected here and sent back to the royal residence.

According to the pottery associated with this building complex, it was constructed sometime during the early First Dynasty and remained in use at least until the mid-Second Dynasty, while some traces of final occupation dating to the late Second and early Third Dynasty show clear evidence for the building having been abandoned by the beginning of the Old Kingdom.²¹⁸ Limited evidence for the late Second/early Third Dynasty activity is mainly present in the form of large pits that were used to destroy some of the mud-brick walls of this building complex, providing a good *terminus ante quem* for the use and functioning of the latter.

4.4.3 Conclusions about the role and function of the building complex at Buto

The precise function of this building complex as a whole has been difficult to establish, even though the expansion of the excavation over the past years has led to a much better understanding of it. The fact that most of the excavated rooms provided almost no further clue about their use and function, except for the examples outlined in the [previous section](#), has led to several hypotheses about the building complex as whole, suggested by the excavators. The results of the earlier excavations during the 1980s, which had focused on a relatively limited area (ca. 25 m by 10 m), first led to a hypothesis that it might have functioned as a religious or funerary complex. The main argument for this interpretation was that certain architectural features have also been found in tombs and temples of the Early Dynastic and early Old Kingdom periods.²¹⁹ This hypothesis was mainly based on the available structures for comparison, which belong entirely to the funerary sphere. Any evidence for secular buildings of official and administrative character and even palatial structures was almost completely absent in the archaeological record at that time, and even now the situation has not improved much. The palace-façade complex at Hierakonpolis was the only mud-brick building of possibly official and palatial character known to authors such as von der Way at the time of the publication of the first results from the excavations at Buto, but this was dismissed as unreliable evidence.²²⁰ Any interpretation or hypothesis for the role and function of such a structure within a larger settlement, as is the case with Buto and

Hierakonpolis, is still based on relatively little archaeological evidence. It is evident that the architecture and the overall layout of the Buto complex does not belong to any kind of regular domestic building but has an official character of some sort, which becomes especially clear when comparing it with the contemporary but much less structured buildings at Elephantine.²²¹ The internal divisions into various areas might suggest a different function for each of them. This is further underlined by the evidence for secondary magazine installations in the westernmost area ([Figure 4.32](#), Area 3). However, the two areas to the east of these installations show less differences, and Hartung suggested that the area adjacent to the magazine area might have been foremost a production area, which is linked to the evidence for food preparation and the manufacturing of stone vessels in at least two rooms there. Several elements near the gateway in the center of the building complex – such as the limestone elements at the doorways and the evidence for the careful wall preparation and decoration, which also characterize especially but not exclusively the rooms of Area 1 – suggest that this was the most official part of the building. This seems to be further confirmed by the presence of sealings here. Considering these various elements that can be recognized within this large Early Dynastic building complex at Buto, a type of official building with administrative function – maybe even of palatial character – is thus far the most plausible interpretation regarding its function and purpose.²²² The hypothesis that it had religious function has to be discarded. Many elements that can be found in the religious and funerary architecture in ancient Egypt were modeled to some extent on real life and official and private architecture.

Although this official building complex at Buto strongly suggests the presence of an important early urban center here, no further archaeological data concerning other elements of the Early Dynastic settlement have been excavated so far. Hartung interprets the two settlement concentrations that have been noted during the drill-core survey along the western part of the site as Pe and Dep, respectively. The northern one with the administrative complex would have been Pe, while the smaller, southern outlier would have been Dep.²²³ The overall size of the Early Dynastic settlement has been estimated at about 10 ha.²²⁴ The early history of the site has shown important trade contacts with the southern Levant during the settlement phase assigned to the Buto-Maadi culture, and this role most likely prevailed later on too. The ongoing excavations by the German Archaeological Institute will certainly shed more light on this site in the future.

4.5 THE EARLY DYNASTIC SETTLEMENT REMAINS AT ELEPHANTINE

As can be seen from the various examples outlined in previous sections, relatively little evidence for the earliest settlements of urban character is currently available. By far the most details, including the opportunity to investigate the long-term evolution of a major regional center, come from the site of Hierakonpolis in Upper Egypt. Other settlements that certainly had a similar urban character – such as Elkab, Buto, and even Tell el-Farkha – are much less well known. Another settlement site with some urban characteristics but confined to a very limited space is the early town at Elephantine. For Early Dynastic period evidence, the evolution from the initial fortress foundation has been traced into the Old Kingdom, but only a few details are available for evaluating the character of the Early Dynastic settlement there (Figure 4.15). While there have been some good arguments for the fortress being a state foundation and part of an attempt to take control of the southern border region in Egypt,²²⁵ there is little evidence that allows for a more in-depth understanding of any of the urban characteristics outlined previously. Elephantine certainly had a fortified enclosure wall, which gradually developed from the fortress to include the extramural settlement that was emerging, but there is very little in terms of further details – such as official buildings of administrative character – on the eastern island. Evidence for a small local sanctuary comes from the niche between the granite boulders, which evolved into the later temple of Satet (Figure 4.11). Few traces of an administrative building dating to the Third Dynasty were found on the western island, which at that time was separated by a water-filled depression from the eastern island and remained separated from the actual town.²²⁶ This is the earliest building at Elephantine that can be interpreted as an official administrative complex linked to the state, apart from the older fortress. However, there is no evidence for any larger official or residential area dating to the Early Dynastic period on the eastern island.²²⁷ The organization of small mud-brick buildings and open courtyards follows exactly the same agglutinated pattern in place during the later Dynastic times, without any clear demarcation for individual buildings or settlement quarters and defining streets or alleys (Figure 4.15). In addition, the occurrence of clay sealings is not concentrated in any specific area; these were found in many places that cannot be distinguished by their architecture alone. These observations do not

really categorize Elephantine as a fully developed urban center, but not as a village either. The precise character of Elephantine in terms of whether it can be considered another example of early urbanism in Egypt remains therefore questionable. It is quite likely that this settlement had a somewhat special function as a fortified border town in the First Cataract region and did not exhibit full urban features during the Early Dynastic Period.

4.6 GENERAL CONCLUSIONS CONCERNING THE EMERGENCE OF URBAN FEATURES IN PREDYNASTIC AND EARLY DYNASTIC SETTLEMENTS

The archaeological evidence shows that a dynamic development toward increased social complexity is clearly witnessed from the early Naqada II period onward. The site of Hierakonpolis is so far the best example for investigating the long-term evolution of an early urban center in Upper Egypt. From the early Naqada II period, it is possible to detect first signs for a proto-urban development among the installations that were part of the large and loosely organized settlement along the desert margins adjacent to the floodplain. The most prominent feature is the presence of large-scale food production areas along the margins of the settlement, such as the breweries, which have been excavated in several locations. One of the locations is along the principal wadi, which was used for an important elite cemetery of early chiefs or rulers with regional power at locality HK 6. Similarly, there is evidence for manufacturing at the pottery workshop at HK 29. These installations provide a first glimpse for the division of labor and centrally organized food production supplying a larger community. As outlined in this chapter, it is not possible to estimate with any precision how many inhabitants were fully or partially involved in agricultural activities and how many would have focused exclusively on food production and manufacturing of specific objects including pottery. As can be seen at Hierakonpolis, the size of the Early Predynastic settlement was considerable even if it cannot be termed urban yet. The decisive turning-point period in settlement development and early urbanism occurs at the transitional phase at the end of the Naqada II into the early Naqada III period. Suddenly, numerous urban features can be recognized from the archaeological data. This is the time when mud brick starts to be fully employed for domestic structures as well as tombs and small shrines and sanctuaries

appear within the settlements – as can be witnessed at Tell Ibrahim Awad in the Delta and at the early ceremonial center at HK 29A at Hierakonpolis. Official buildings used by the elite as residences but also functioning on an administrative level can be recognized, such as the so-called Naqada residence situated on the Western Kôm at Tell el-Farkha, which dates to the same time frame. Complex trade relations between the Delta, southern Palestine, and possibly the Levant as well as Upper Egypt can be seen from the import of pottery vessels, foremost wine jars, which have also been found in large quantities as grave goods in tomb U-j at Abydos. The administrative system that became so prominent in the later Early Dynastic Period starts to grow from regional to national level during the late Predynastic Period. It seems that the early Naqada III period is decisive for the appearance of urban society in Egypt, and the archaeological evidence sheds some light on the emergence of dynamic settlements displaying most of the features that can be considered urban during the following Early Dynastic period.

At Hierakonpolis, a gradual shift of settlement toward the floodplain as well as an increasing nucleation can be observed that seems to have occurred at other sites too – for example, at Naqada. This shift has been attributed to some extent to climatic changes that caused lower and less-destructive Nile floods, allowing for the occupation of elevated river levees and geziras or any other higher ground available – for example, in the form of natural rock formations. While settlements became smaller in their overall size, which is to some extent related to the perennial flooding, they were also much more compact and exhibit densely constructed mud-brick buildings of an agglutinated design that leaves no space for major streets or even the recognition of individual buildings. This gives the impression of a kind of labyrinth-like layout. The only structures that are clearly distinguishable from the rest of the settlement are cult places and early shrines/temples as well as official/administrative building complexes that were marked by a perimeter wall. The finds as well as the architectural layout – especially the building complex marked by the palace-façade gate at Hierakonpolis – bear witness of an important hierarchy within the settlement and the presence of a strong elite controlling a wider region, which is paralleled in the nearby cemeteries. Evidence for administrative activities in the form of clay sealings and large storage facilities has also been discovered in conjunction with these large elite residences that during the later Dynastic period

developed into the seat of the local mayor or governor. In addition, first traces of a small cult place within such a complex has been found at Hierakonpolis. Thus, the threefold function of these official complexes (residential, administrative, and cultic) is already to some degree present during the first two dynasties.

Little archaeological evidence exists for the overall size of these early urban centers because only small areas have been excavated at the sites. New fieldwork in the future will certainly shed more light on this issue and others discussed in this chapter.

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The Settlements of the Old Kingdom

5.1 INTRODUCTION

The Old Kingdom encompasses a period of more than 500 years (Table 5.1), from the Third Dynasty to the end of the Sixth Dynasty. It is probably best known for its monumentality and the overproportionate expense and effort put into monumental funerary architecture such as the pyramids and related mortuary temples, including their provisioning. Stone architecture is omnipresent in the funerary sphere, and no effort was spared in the use of stones coming from different parts of the country: red granite from Aswan, limestone from Turah, and basalt from Widan el-Faras, a quarry located in the Western Desert north of the Fayum region. These stones were chosen as building materials because of their high quality. It comes as no surprise that most of the archaeological fieldwork over the past 120 years has focused heavily on such funerary monuments. Ironically, this disproportionate focus of the Old Kingdom Egyptians on their mortuary cults and the afterlife is also reflected to a great extent in the modern research interests concerning this period.

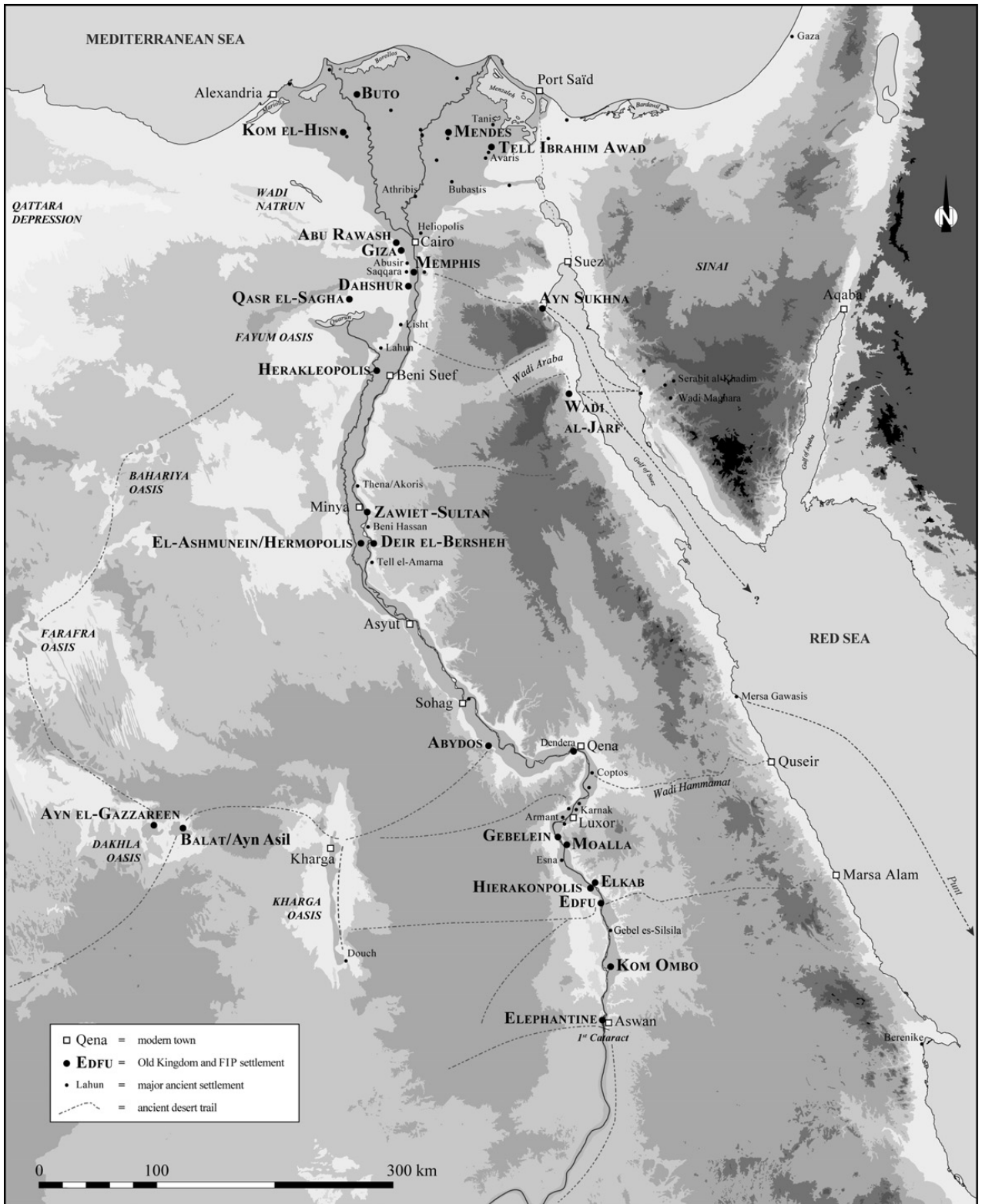
In comparison with the funerary culture, the towns and cities of the Old Kingdom are much less explored. Archaeological preservation provides us only with “little windows” into these settlements for most of the Nile Valley, but better-preserved and more-accessible evidence appears near or at many of the large royal mortuary complexes in the Memphite region. They lie either in the desert or along the desert edge, depending on which element of the mortuary complex they were attached to. At first glance, nothing stands out in terms of large urban towns and cities, but this seems to be more a reflection of the preservation and accessibility of Old Kingdom settlement remains than a historical reality.

Textual sources provide good evidence for the centralized state putting much effort into the development of the infrastructure necessary to efficiently ensure the constant supply of and construction work in the Memphite region. From the Third Dynasty onward, Egyptian provinces were gradually integrated into the wider economic network, a development that became especially visible toward the end of the Old Kingdom. This process started in the form of foundations of numerous domains and estates that controlled large amounts of agricultural land and sent a certain amount of goods to the capital, but over time a shift can be noticed toward an administration that was based on entire nomes or provinces. Each nome had a capital that was the seat of the highest official, the nomarch, who in most cases had strong links to the Egyptian capital in Memphis. By the end of the Old Kingdom, the provincial towns had developed into important urban centers, especially in Upper Egypt (Figure 5.1). From an archaeological perspective, there is much evidence for installations and settlements in the Memphite region dating to the first half of the Old Kingdom, while from the late Fifth Dynasty onward more data becomes available from the larger provincial towns. One of the main problems in relation to the study of urbanism of the third millennium BCE is the accessibility and preservation of settlement remains in the Nile Valley and Delta; those along the desert edge remained in a better state of preservation, being covered by sand and not prone, for example, to any destruction by agriculture. These towns in the floodplain are tell settlements, founded on levees and turtlebacks/geziras and over time growing into large mounds that conspicuously mark the landscape. However, the earliest remains, which are frequently those of the third millennium BCE, are the least

TABLE 5.1. Early Dynastic and Old Kingdom Chronology of Egypt

Dates B.C.			
2000	MIDDLE KINGDOM	Dynasty 11 (all Egypt) (2055-1985 B.C.)	Mentuhotep IV (1992-1985) Mentuhotep III (2004-1992) Mentuhotep II (2055-2004)
2100	F.I.P.	First Intermediate Period 7 th -8 th Dyn. (ca. 2181-2160) 9 th -10 th Dyn. (2160-2025) Theban 11 th Dyn. (2125-2055)	9th-10th Dyn. (Herakleopolitan) Merykara Khety (Wahkara) Khety (Nebkaura) Khety (Meryibra)
2200			11th Dyn. (Theban) Intef II (2063-2055) Intef II (2112-2063) Intef I (2125-2112) [Mentuhotep I]
2300		Dynasty 6 (2345-2181 B.C.)	Nitiqret (2184-2181) Pepi II (2278-2184) Merenra (2287-2278) Pepi I (2321-2287) Userkara (2323-2321) Teti (2345-2323)
2400	OLD KINGDOM	Dynasty 5 (2494-2345 B.C.)	Unas (2375-2345) Djedkara (2414-2375) Menkauhor (2421-2414) Nyusera (2445-2421) Raneferef (2448-2445) Shepseskara (2455-2448) Neferirkara (2475-2455) Sahura (2487-2475) Userkaf (2494-2487)
2500		Dynasty 4 (2613-2494 B.C.)	Shepseskaf (2503-2494) Menkaura (2532-2503) Khafra (2558-2532) Djedefra (2566-2558) Khufu (2589-2566) Snofru (2613-2589)
2600		Dynasty 3 (2686-2613 B.C.)	Huni (2637-2613) Sanakht ? Khaba (2640-2637) Sekhemkhet (2648-2640) Djoser (2667-2648) Nebka (2686-2667)
2700		Dynasty 2 (2890-2686 B.C.)	Khasekhemwy Peribsen Sened Weneg Nynetjer Raneb Hetepsekhemwy
2800	NAQADA III _D		
2900	NAQADA III _{C1-2}	Dynasty 1 (ca. 3000-2890 B.C.)	Qa'a Semerkhet Anedjib Meryneith Den Djet Djer Hor Aha = Menes ? Narmer
3000	NAQADA III / EARLY DYNASTIC PERIOD		

By G. Marouard based on I. Shaw, *The Oxford History of Ancient Egypt*, 2000.



5.1. Map of Old Kingdom and First Intermediate Period settlement sites in Egypt. By G. Marouard.

accessible ones; they are often deeply buried under later settlement remains. Therefore, it is only possible to obtain small glimpses into these earliest phases of occupation, and it is rare that a large area can be exposed. One exception is the newly cleared eastern part of Tell Edfu, where Old Kingdom settlement remains have been preserved underneath several meters of seabkh debris and rubble from previous excavations, covering an area of about 1,200 m². In most other cases, such as at Elephantine, Old Kingdom remains were reached primarily in small areas by digging deep trenches. They also appeared underneath the foundations of later temple structures, but it has only been possible to expose limited areas. This chapter has the aim of exploring the available archaeological evidence for settlements in different regions and also to differentiate between various types of towns and settlements that mark the third millennium BCE. As indicated, there is a somewhat uneven distribution of the evidence for different regions – the Memphite region versus Upper Egypt and the Delta.

The settlement system of the third millennium BCE is further characterized by the first attempts of town planning by the state. Closely related to such planning efforts is the foundation of production and support facilities, which could reach a considerable size when workers' accommodations and food production areas were added in order to provide a complex system of logistical support for the construction of the royal mortuary complexes. It is in this context that the central government conceived and developed its first planned and state-supported settlements. These settlements appeared in different layouts and sizes, first primarily in the Memphite region, but additional traces have also been found recently in places that were exploited for raw materials. For example, remnants of a small settlement have been found in Middle Egypt, dating to the Fourth Dynasty, at Al-Shaykh Sa'id and Wadi Zabayda,¹ which was closely linked to the manufacturing of stone vessels from the limestone and calcite alabaster that was extracted in a nearby quarry (Figure 5.30). Large amounts of bread molds and significant ash deposits were also discovered during the excavations, indicating food production on a large scale. Of the actual buildings, only one wall has so far been excavated which does not permit any further analysis of the layout of this settlement.²

There is also evidence for temporary settlements and campsites along the Red Sea coast during the Old Kingdom (Figure 5.1), such as those discovered at Ayn Soukhna and Wadi el-Jarf.³ Both sites provided logistical

support that was needed for seafaring expeditions, foremost to the Sinai, for the exploitation of copper and turquoise. The foundation of settlement installations for supporting the temporary presence of larger expeditions including workforces was entirely conceived by the central government. The exploitation of raw materials for the monumental building projects of the Old Kingdom rulers remained an exclusive right of the state.⁴ This situation emphasizes the effort and expenditure made by the Old Kingdom kings to control and develop small settlements in marginal areas that were linked to the exploitation of raw materials. These form another distinct group of agglomerations, which fall under the category of "special-purpose settlements and production sites" founded by the state (see Chapter 1).

It is important to emphasize the powerful and centralized role of the state, which invested much effort in establishing strong control over the provinces, acquiring a large amount of resources in terms of food supply and agricultural revenue in addition to the raw materials, most of which were specifically destined for the Memphite region. To assure a constant supply, the rulers founded agricultural domains and estates that fully supported the upkeep of their mortuary cults, including the people who were full- or part-time priests and administrators at these royal mortuary complexes. The settlements were an integral part of the complexes: the so-called pyramid towns and also the smaller structures that served as more or less temporary accommodation at the pyramid temples. In most cases, the number of inhabitants was restricted, a fact known from the few royal decrees that have been found at these sites, meaning that their general development was regulated and remained completely dependent on the state. This is noticeable especially toward the end of the Old Kingdom, when the central government fell apart politically and the economic and administrative systems failed. As a consequence, none of the state foundations remained occupied. However, the state-founded and special-purpose settlements that emerged, such as the workers' installations and production facilities, are an important element of the Old Kingdom settlement system and attracted a considerable number of people to live in the Memphite region. As mentioned previously, within the provincial areas of the country, especially in the southern nomes, urban settlements start to become increasingly visible toward the end of the third millennium BCE, at the same time that the gradual process of political decentralization becomes noticeable. The extremely strong focus of the rulers in the Memphite region,

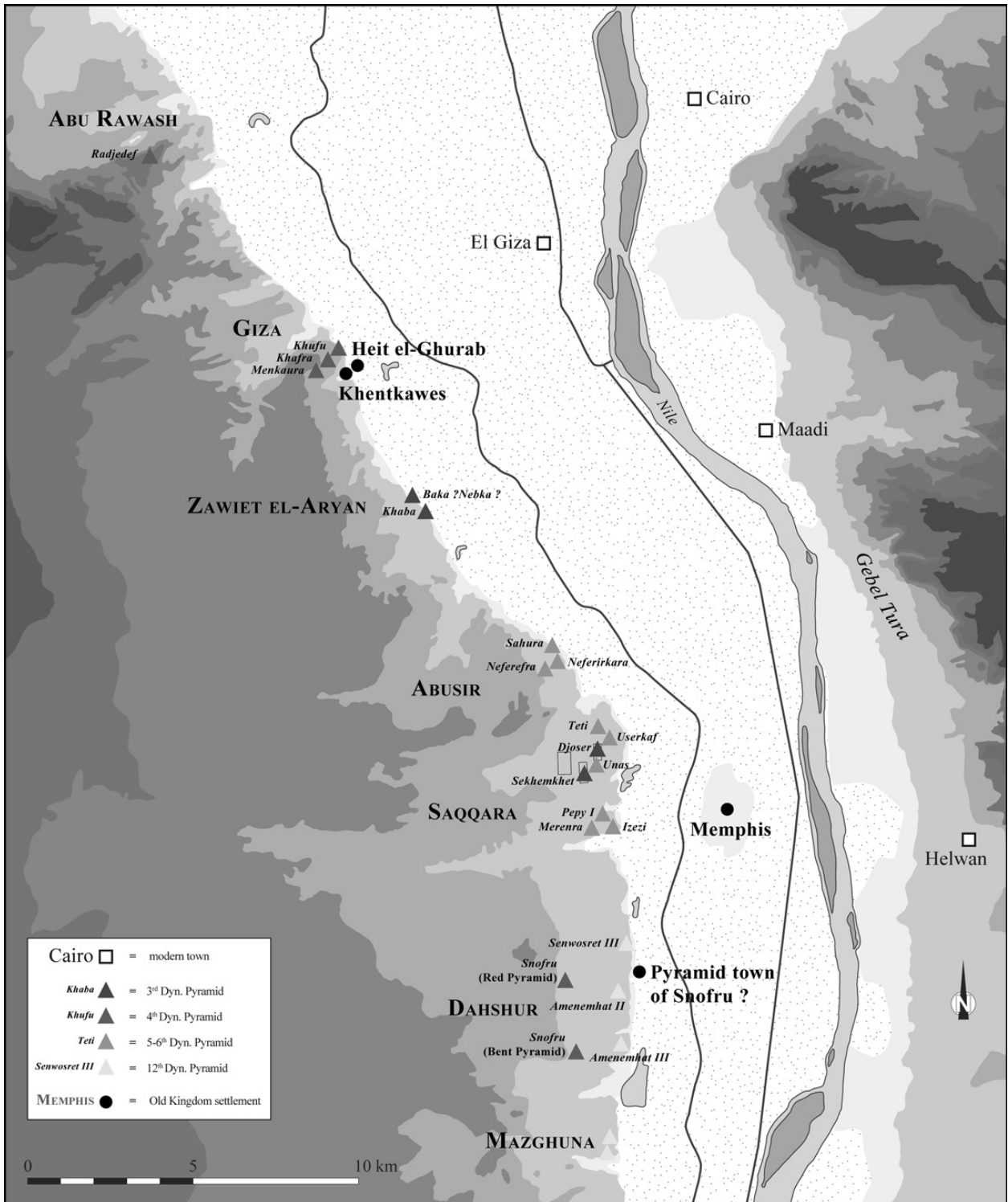
where a large part of the Egyptian population seems to have been concentrated, is one of the reasons why the provincial areas remained relatively silent until the Fifth Dynasty. On the other hand, the preservation of early Old Kingdom remains is rather poor in the Delta region and the floodplain. It is however also possible that the provincial settlement system saw a stagnation or even decline during the earlier Old Kingdom, in comparison with the Early Dynastic Period, simply because no rulers focused their attention in the same way on the older provincial centers. The latter had previously emerged as a result of a long-term evolution as capitals of the so-called proto-kingdoms. Michael Hoffman indicated such a trend for Hierakonpolis.⁵ From the late third millennium BCE onward, this development seems to be reversed, and it is the provinces that become more prominent as a direct result of many elite families establishing their power bases as nomarchs in order to govern large sections of the Nile Valley and the Delta.

It is the aim here to investigate the character of different types of settlements and establish the common features and major differences in relation to the layout and organization as well as the social complexity of the inhabitants. To what extent was the society in Old Kingdom Egypt an urban society, and what was the relation between center and periphery in this perspective? As it has been possible to see for the Early Dynastic Period, the parameters for urban life in Egypt were set during this earlier time – toward the end of the fourth and into the early third millennium BCE – but to what extent did the strong centralized state of the following 800 years support or hinder urban development in the entire country? The first part of this chapter will address the evidence for settlements related to the royal mortuary foundations and establish the role of state foundations. The gradual urbanization of the countryside becomes most visible by the end of the third millennium BCE, especially in Upper Egypt at towns such as Elephantine,⁶ Tell Edfu,⁷ Dendera,⁸ and Abydos⁹ (Figure 5.1). Settlements such as Elkab¹⁰ and Hierakonpolis¹¹ show evidence for settlement activity dating back to the Early Dynastic Period and continuing into the early Old Kingdom, but only small areas and isolated buildings have been excavated that can be attributed to the later periods. In the Delta, Old Kingdom settlement activity has been noted at Kôm el-Hisn,¹² Mendes,¹³ and Buto¹⁴ as well as Tell Ibrahim Awad,¹⁵ but limited areas have been excavated so far, making it difficult to understand and further evaluate the overall organization and layout of these towns. Some additional evidence for the Old

Kingdom comes from the Dakhla Oasis in the Western Desert, where two settlement sites have been discovered at Ayn Asil/Balat¹⁶ and Ayn el-Gazareen¹⁷ (Figure 5.1). The following sections of this chapter deal primarily with those sites from which sufficient and reliable archaeological evidence is available to allow for an in-depth analysis of the layout, organization, and function of each settlement.

5.2 SETTLEMENTS RELATED TO ROYAL MORTUARY CULTS IN THE MEMPHITE REGION

The sparse archaeological evidence for Old Kingdom towns and villages situated in the floodplain within the Memphite region has led to a focus on settlement sites that have been discovered along the desert edge.¹⁸ Founded initially as royal burial grounds in the Western Desert zone in relative proximity to the floodplain, the vast cemeteries of the Memphite region, spreading from Meidum in the south up to Abu Rawash in the north (Figure 5.2), saw a major and long-term development of structures for royal and private tombs and associated mortuary cult installations in the form of temples, chapels, and causeways.¹⁹ For the successful construction and upkeep of these establishments, it was necessary to create a well-organized infrastructure that included ramps and routes for the transport of large amounts of construction material. The supplies and materials, especially stone and timber, were sometimes conveyed over long distances to each building site, which included canals and docking areas in the nearby floodplain for boats making deliveries.²⁰ From a logbook or diary that was kept by an inspector called Merer, who had been active during the reign of Khufu, new insights can be gained about the transportation of raw materials to major construction sites and the logistics involved.²¹ Merer was an official in charge of a phyle of about 200 men who had the task of obtaining stone deliveries from the Turah limestone quarries. The limestone was then transported by boat over a course of four days from the quarry site on the East Bank of the Nile, first southward to an administrative center called Ra-She-Khufu²² and then probably navigating through a tributary of the Nile flowing close to the western side of the Nile Valley, with the final destination being the pyramid construction site at Giza.²³ This unique document provides a good insight into the work organization and efficiency of supplying large amounts of building stone to a construction site – a feat only possible with a well-established infrastructure.



5.2. Map of the Memphite region. By G. Marouard, after J. Baines, J. Malek, *Atlas of Ancient Egypt*, New York, 1996, 135.

Closely related to the royal pyramid sites are habitation sites that provided accommodation for workers, artisans, priests, and administrators in the form of barracks and

houses made of mud brick that were used for a multitude of activities. It is these kinds of installations that will be investigated in depth here. They rarely form towns as

such, but they are an interesting reflection of the community organization at the pyramid sites, in addition to providing a first glimpse into the practice of “town planning,” which is most clearly demonstrated at the settlement linked to the mortuary complex of Queen Khentkawes at Giza.

Evidence for mud-brick installations used specifically for habitation first came to light during the excavations of the various pyramid complexes at the turn of the past century. Mud-brick buildings were more or less accidentally discovered during the exploration and excavation of the stone temples and their surroundings linked to the impressive funerary monuments. Even though these humbler constructions were rarely the main foci of the publications of the period, they were to some extent recorded and included in final reports. With the current standing of archaeological research, there is now a good basis of evidence available for habitation sites and related installations such as storage space in connection to the royal cemetery sites in the Memphite region. These constructions encompass a wide spectrum of building categories: from official, administrative installations to associated magazines, silos, and storage facilities as well as private/residential houses, in addition to large barrack-like structures of a more temporary nature. In the past, these installations have been given rather vague names as to their nature and purpose, and only recently has a first attempt been made toward a more precise categorization, using the archaeological reports as basis for research.²⁴

These settlements have repeatedly been called “pyramid towns,” a somewhat problematic term that has been inconsistently used for a variety of settlement types located in the desert, close to or at the royal mortuary complexes.²⁵ Several attempts have not resulted in resolving the problem of establishing a more coherent definition of the term.²⁶ However, the increasingly available evidence from more-recent excavations of settlements related to mortuary temples, especially in the Giza region, has much to contribute to this issue.

In addition, it is crucial to investigate the foundations of settlement and habitation sites and whether they can be considered a local initiative taken by the people attached to the royal mortuary cults or whether these installations were part of the original layout of a much larger temple complex. How much planning went into their layouts, or, quite the contrary, are these local measures taken by small communities that found a way to adapt to their working environment? Do they show any urban features, or should they be classified as special-purpose settlements

that have little in common with the towns located in the floodplain and Nile Delta? These issues should be addressed within the wider framework of Old Kingdom settlement development, their individual layout, and the general organization as well as the detection of certain common patterns in the overall evolution of such sites.

Three main types of settlements can be distinguished near the royal cemetery sites situated along the Western Desert edge in the Memphite region. They fall into different categories according to their size, their location, and the archaeological data relating to the layout of the buildings and the respective finds that provide information about the activities of their inhabitants:

1. A small number of mud-brick buildings used for residential purposes and possibly administration situated at the pyramid temples²⁷
2. Workmen's barracks and installations for production and manufacturing activities in close proximity to the royal construction sites
3. Larger settlements located at or near the Valley temples along the border to the floodplain²⁸

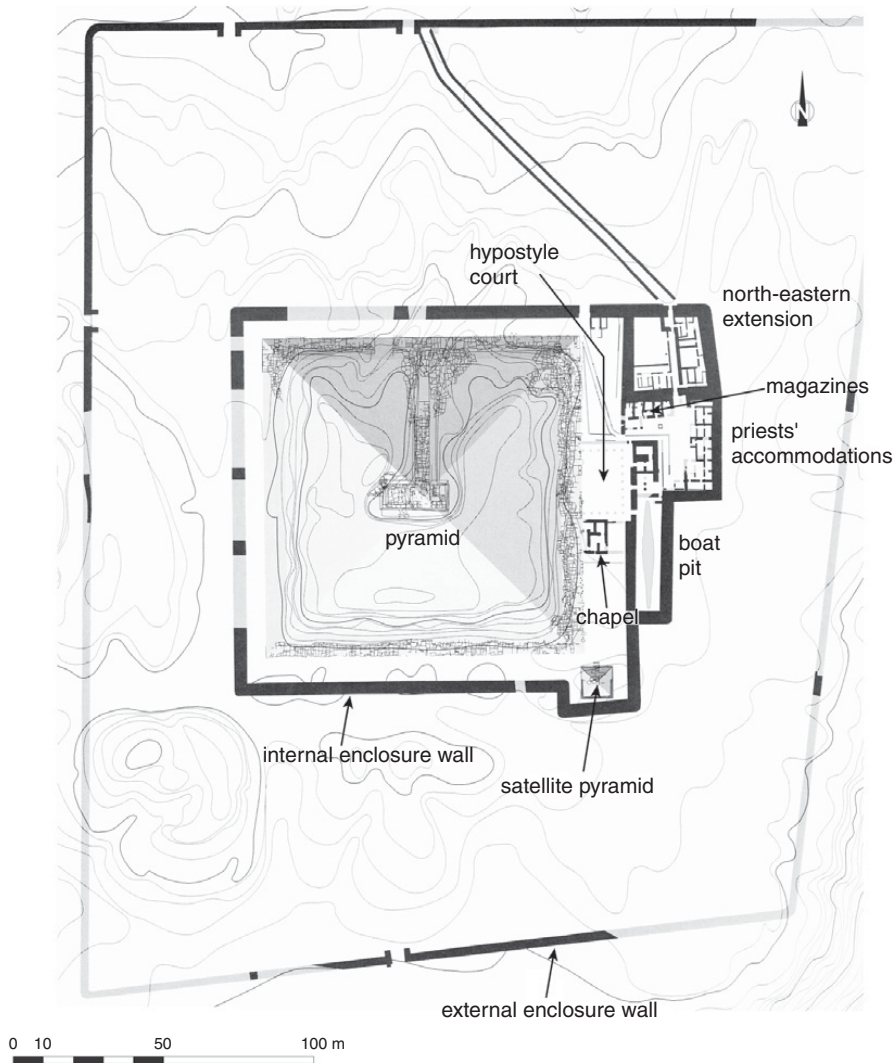
5.2.1 The settlements at the pyramid temples

The first kind concerns small numbers of mud-brick buildings that were found in the precinct of the pyramid temples. These settlements, which usually consist of a small group of structures that are confined to the available space within the interior of the temple enclosure walls, cover an area between 300 m² and 1,200 m² and have been interpreted as “dwellings for priests.”²⁹ The archaeological evidence presented in the relevant publications is often restricted to the temple architecture and associated finds, whereas details and plans of the seemingly less substantial and little-preserved mud-brick buildings discovered at these sites are described in much less detail.

Nevertheless, such settlement structures have been discovered at most of the pyramid temples, and the better-preserved examples are those found at the sites of Abu Rawash and Abusir, both of which have the advantage of having been excavated fairly recently.

5.2.1.1 Abu Rawash

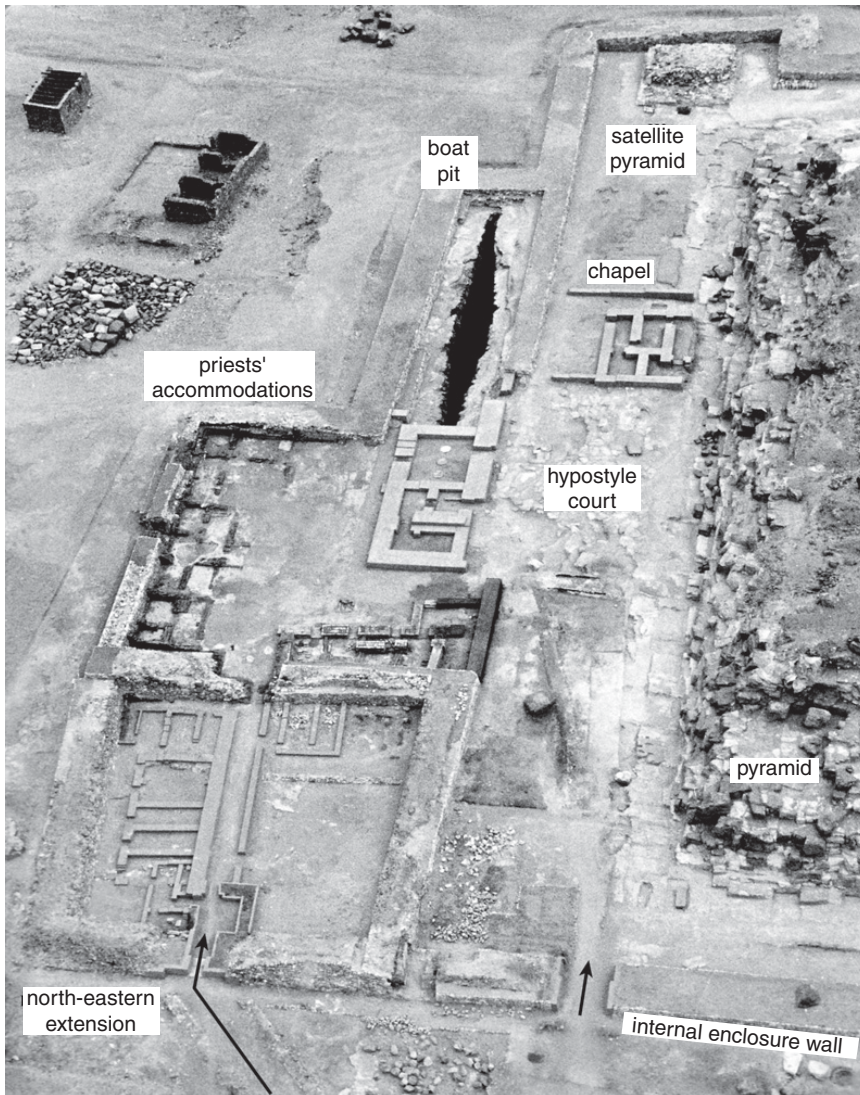
The Fourth Dynasty pyramid complex at Abu Rawash, 2 km north of Giza, consists of the royal pyramid with a small satellite pyramid at the southeastern corner of a precinct surrounded by a stone enclosure wall (exterior



5.3. Plan of the pyramid complex of Radjedef (4th Dynasty) at Abu Rawash. After M. Valloggia, *Abou Rawash I, Le complexe funéraire royal de Rêdjedef: Étude historique et architecturale*, IFAO 63, Le Caire 2011, fig. 73. © Université de Genève and IFAO, image courtesy M. Valloggia.

enclosure) (Figure 5.3). Along the eastern side of the pyramid, remains of the cult installations have been found, and these were enclosed by another stone wall (interior enclosure).³⁰ The cult buildings consist primarily of the pyramid temple, which was built directly against the eastern side of the pyramid, in addition to a larger hypostyle courtyard that was accessed on its eastern side through another chapel (Figure 5.4). Immediately to the south of the latter, a boat pit was excavated. In association with these cult buildings, several magazine structures and other outbuildings made of mud brick have been excavated.³¹ A series of five magazines within a large open courtyard area lies just to the north of the chapel and the entrance area to the hypostyle hall (Figure 5.4). The area

to the east is occupied by several buildings leaning against the interior enclosure. They have been interpreted as priests' houses from their layouts and the finds made in relation to their use and the functioning of the buildings. The excavator distinguishes four separate house units according to the individual entrances and dividing walls (Figures 5.3 and 5.5).³² From the published plan, the character of this small building complex becomes apparent. The walls are arranged at right angles, leaning against the interior of the stone enclosure. The individual rooms are mainly accessible from the western and southern sides. Even though some rooms form a group and might be identifiable as "houses," there is no clear separation among them because they are all built next to each



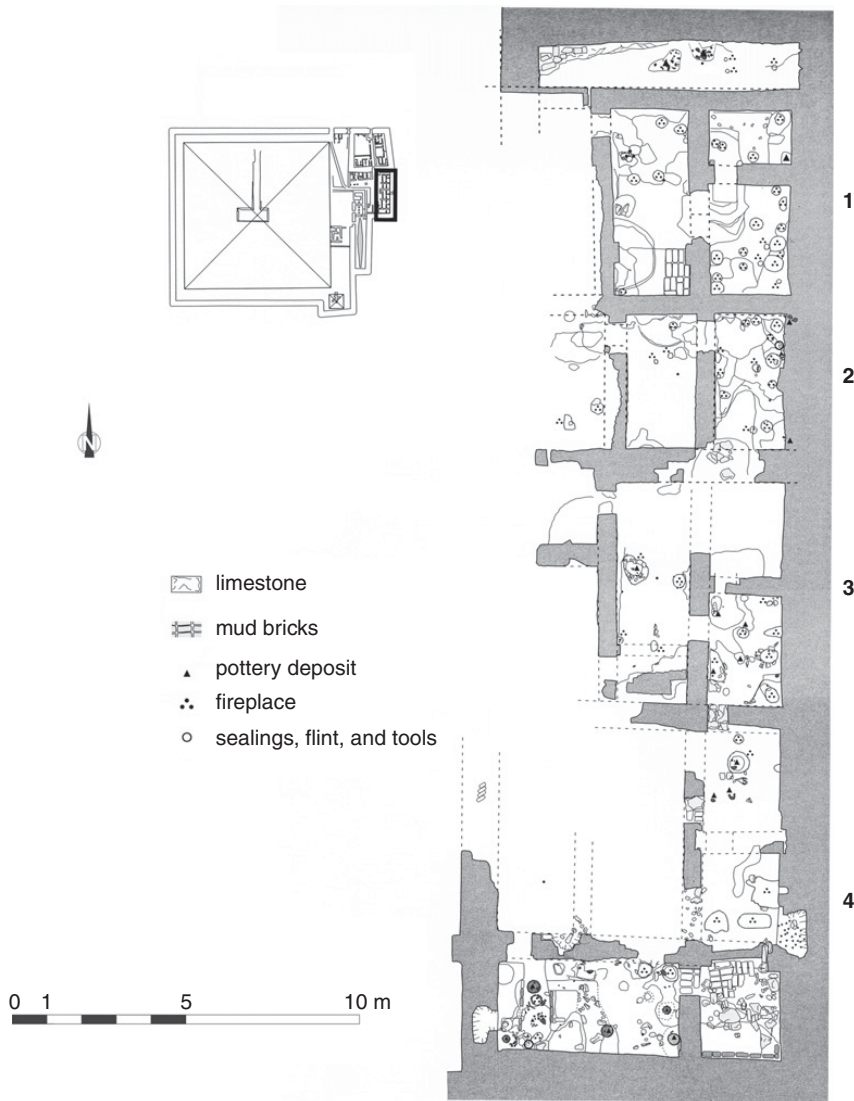
5.4. Aerial view of the eastern side of the pyramid complex at Abu Rawash. After M. Valloggia, *Abou Rawash I, Le complexe funéraire royal de Rêdjedef: Étude historique et architecturale*, FIFAO 63, Le Caire 2011, fig. 191. © Université de Genève and IFAO, courtesy M. Valloggia.

other and share common walls. A certain uniformity can be observed in the overall layout, with a larger rectangular room fronting two small rooms at the back (Figure 5.5).

The excavations permitted a relatively precise dating of these structures, which saw two building phases during the Fourth Dynasty. They were clearly of the original plan for the cult installations and the outbuildings.³³ The relative uniformity in the arrangements of the living units suggests that they were a planned installation. Although a division into separate living units has been made by the excavator, it does not seem entirely convincing to consider, for example, the room group 2 as a separate “house” (Figure 5.5). Furthermore, one can see on the

plan that the adjacent southern area encompasses additional rooms and that there was a doorway to the neighboring unit to the north, into room R. It is evident that the layout of the living quarters was orthogonal, and the plan shows the typical phenomenon of little physical separation between units and room groups, which seems to indicate that the small community of people living here was not separated into formal “houses.”

The structures’ identification as living quarters is confirmed by the finds within the individual rooms. It is noticeable that the back rooms seem to have been used for food preparation and cooking because of the numerous fireplaces found on the floors (Figure 5.5). Apart from



5.5. Plan of the priests' accommodations of the pyramid complex at Abu Rawash. After M. Valloggia, *Abou Rawash I, Le complexe funéraire royal de Rêdjedef: Étude historique et architecturale*, FIFAO 63, Le Caire 2011, fig. 274. © Université de Genève and IFAO, courtesy M. Valloggia.

pottery, the most common finds were flint tools (knives and borers), with some fragments from a copper needle and two clay sealings.³⁴ Pottery storage jars had been set into the floors as well.³⁵ The duties of individuals stationed – probably on a semipermanent basis – at the pyramid complex of Radjedef included administrative and cult activities. There is no evidence for families living here long-term, suggested by the overall restricted space (about 18–25 m² per unit), lack of personal storage facilities and relatively few alterations in the layout. From the pottery evidence, it is possible to deduce that the funerary cult for Radjedef functioned until the Sixth Dynasty.³⁶

There is no evidence, however, for any “progressive urbanization”³⁷ or “intrusive addition of houses,” and there is strikingly little in terms of new constructions and modifications. Was this linked to the much more isolated location and relatively long distance of the pyramid complex from the Nile Valley? The pyramid of Radjedef lies in a very windy and exposed area on top of the desert plateau above the modern village of Abu Rawash, and the location might have been a factor contributing to why this was not a place that favored permanent settlement. Nevertheless, there was some accommodation available for the cult personnel and

administrators of Radjedef's mortuary foundation to facilitate their stay at the site, which most likely happened only on a temporary, rotation basis. There is also no evidence for any large, private storage installations such as round silos that would have been attached to any of the buildings. At Abu Rawash, mainly the rectangular type of magazines was found that is commonly used for the official funerary cult. The storage jars embedded in the floors of the living quarters are the only evidence for short-term food storage used by the residents. In conclusion, Abu Rawash shows the existence of typical priests' accommodation in the form of small mud-brick buildings that do not really form a larger settlement but remain rather restricted in number until the site was abandoned at the end of the Old Kingdom. Its inhabitants mainly consisted of administrators, priests, and related staff engaged in the upkeep of the cult for Radjedef and the royal family.³⁸

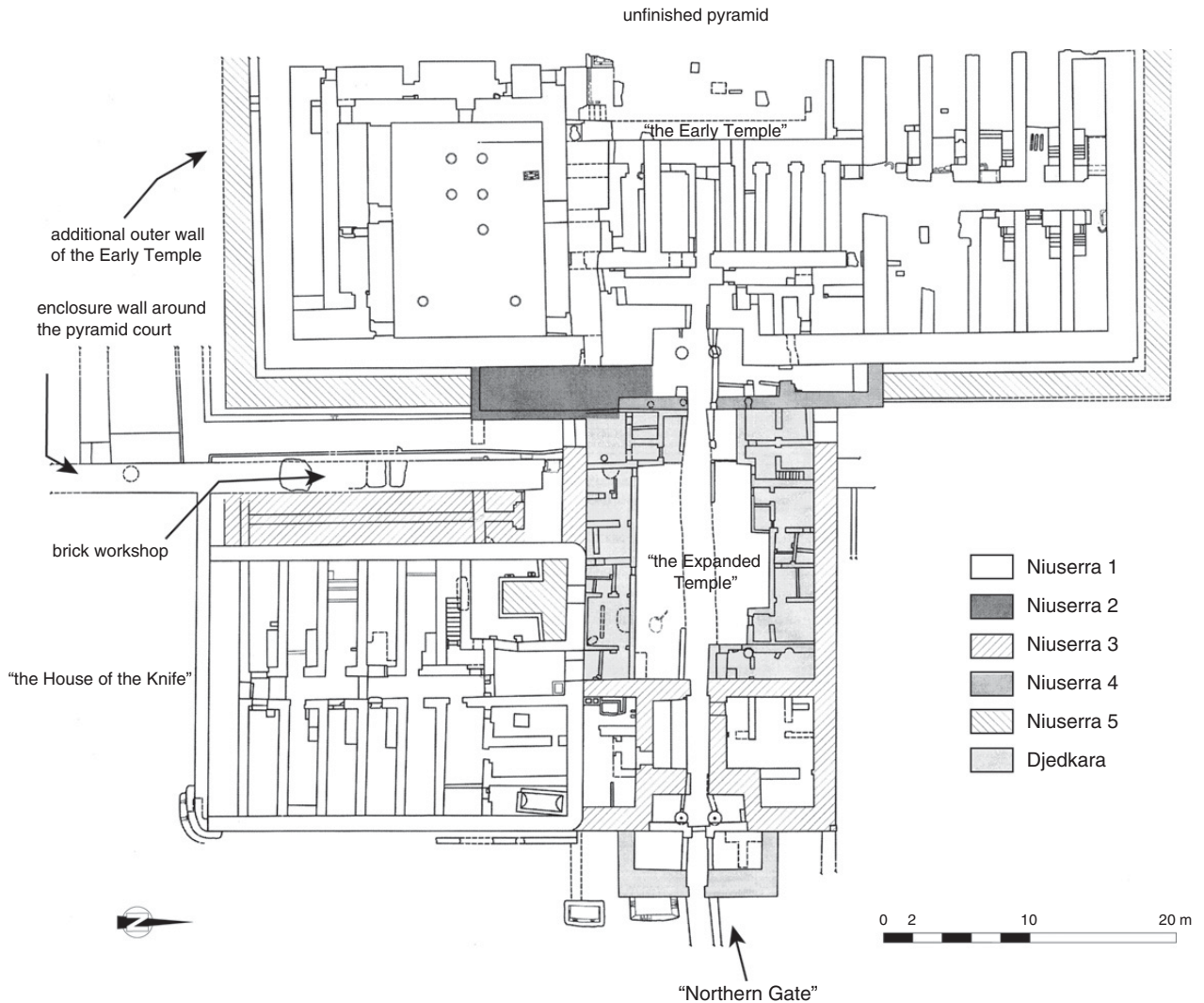
5.2.1.2 *Abusir*

The other example that merits some more in-depth presentation is situated at the royal necropolis of the Fifth Dynasty at Abusir (Figure 5.2). The funerary complex constructed for Raneferef was much affected by the ruler's untimely death, which left the pyramid incomplete. As a result, it was finished quickly, with the unusual appearance of a severely truncated superstructure.³⁹ However, the buildings for the funerary cult were completed, though mainly in mud brick instead of the usual stone architecture, and the whole complex saw the functioning of the cult for a considerable amount of time, until the end of the reign of Teti in the Sixth Dynasty. The pyramid temple saw several stages of enlargement from the "early temple" structure, mainly focusing on the actual chapel and magazines next to the pyramid and the extensions and additions made to the east of it over time (Figure 5.6).⁴⁰ The expansion of the temple is characterized by the addition of a rectangular courtyard and a monumental gateway made of thick mud-brick walls and was fronted by a columned portico. The courtyard was surrounded on all four sides by wooden columns – 22 total (Figure 5.7). It also had an access to the slaughterhouse (or "House of the Knife") on its southeastern corner (Figure 5.6). This courtyard was gradually transformed into a space that later housed mud-brick buildings. The stratigraphy shows that not all of them appeared simultaneously, and they exhibit characteristics similar to those noted at the other pyramid temples in the region.

The buildings consist of rooms that use the wall of the courtyard as their rear wall, and it is difficult to distinguish between the individual house units; the rooms are built in the usual agglutinated fashion, sharing common walls. According to the various entrances, seven house units have been tentatively defined, each consisting of three small rooms. Residential use has been suggested for all of them. Fireplaces have been found in almost all of the units, and the other finds consist of pottery, stone vessel fragments, flint knives and stone tools, and in some cases broken clay sealings.⁴¹ This certainly supports the interpretation of domestic use but does not exclude an administrative function as well. Furthermore, it has been estimated that about three people lived in each house unit, which means a total population of around twenty people, a size that conveniently resembles that of a temple phyle.⁴² The excavators suggest that these buildings were also not used by long-term occupants but rather by priests and administrators living here on a rotation basis. Further remains of similar accommodation were also found at the pyramid temple of Neferirkara.⁴³

The settlement remains found at the two sites of Abu Rawash and Abusir have the advantage of having been excavated stratigraphically and illustrate well the problems encountered in any attempts to identify the exact function and use of mud-brick buildings found within the precincts of the pyramid temples. While there is evidence for the foundation of such installations concurrently with the construction of the pyramid temple complex, the evidence from Abusir shows that there are also cases in which such installations appear later. The archaeological evidence shows that Raneferef's mortuary complex saw several additions and a long-term evolution of its architectural layout, which included the use of the open courtyard for additional mud-brick buildings for the temple staff. The excavation results indicate that the mud-brick buildings within the courtyard form an important element that had been missing at the complex before, and the fact that they remained restricted to the courtyard shows that some regulations as to size and number of inhabitants was adhered to.

As far the architecture and layout of the various buildings is concerned, it is not possible to distinguish between certain rooms or entire structures used either for habitation or administrative purposes only. Such a separation might even be completely artificial if rooms were serving multiple purposes. Administrative activities leave little archaeological evidence apart from broken clay sealings or other objects directly related to such work, but when

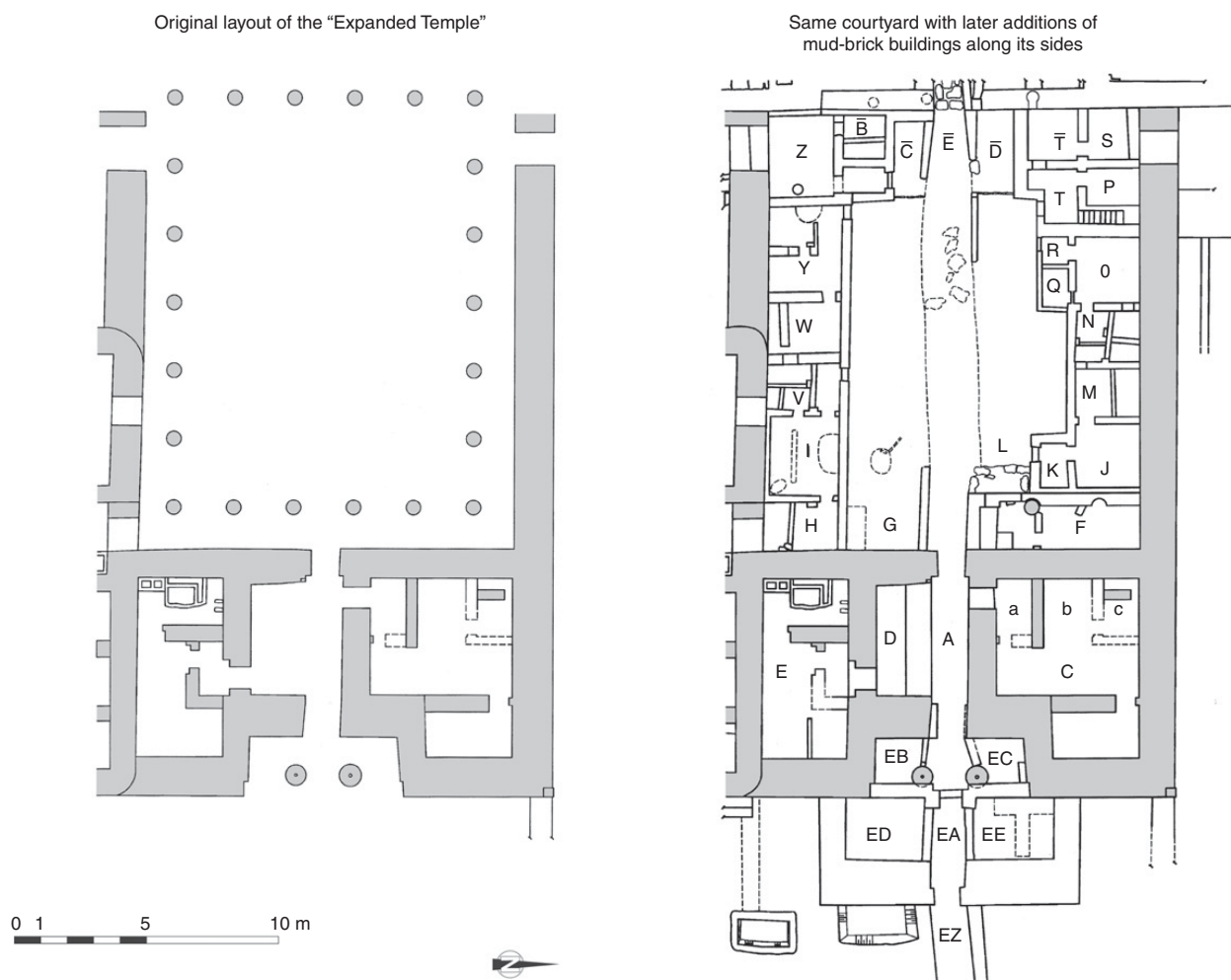


5.6. Plan of the mortuary complex of Raneferef (5th Dynasty) at Abusir. After M. Verner et al., *Abusir IX. The Pyramid Complex of Raneferef. The Archaeology*, Prague 2006, 104, fig. 1.5.2.

spaces were thoroughly cleaned out on a regular basis, the sealings would be found in waste deposits on the outside and not within the buildings.⁴⁴ There is no specific evidence that can be tied to priests either. The occurrence of pottery used for the funerary cult ceremonies has been mentioned as a piece of evidence for the presence of priests,⁴⁵ but as can be seen at many sites, cult pottery was usually discarded in huge heaps outside the chapel and/or temple and not necessarily within the mud-brick dwellings.⁴⁶ Furthermore, there is surprisingly little evidence for the production of large quantities of such pottery vessels, which are characterized specifically by miniature jars, miniature bowls, and miniature dishes as well as beer jars. This production was clearly situated

elsewhere – probably closer to the Nile Valley according to the need for water and fuel for firing pottery.

From textual records such as the Abusir papyri, it is known that priests performed the funerary rituals for the deceased ruler on a rotation basis.⁴⁷ There are records that mention an organization into different phyles of the ancient Egyptian officials and priests involved in the cult for the deceased king.⁴⁸ Funerary priests would find accommodation during their times of service directly at the sites, and their duties lasted usually one month at a time. Therefore, some of the buildings must have been used in relation to these activities. For example, low, gently sloping platforms used for sleeping have frequently been encountered within houses in the Memphite region



5.7. Plan showing the two phases of the courtyard of the “Expanded Temple” at the Raneferef mortuary complex (5th Dynasty) at Abusir. By G. Marouard, after M. Verner et al., *Abusir IX. The Pyramid Complex of Raneferef. The Archaeology*, Prague 2006, 68, figs. 1.3.2 and 1.3.3.

for the Old Kingdom.⁴⁹ Ludwig Borchardt noticed those features during his excavations of the temple complex of Neferirkara at Abusir; he concluded that the only evidence for the domestic use of brick structures at the pyramid temples were the fireplaces and the occasional sleeping platforms.⁵⁰ A further line of investigation is the possible evidence for long-term developments at these sites and inhabitants transforming the initial layout of buildings according to their needs, which could be an indication for a change from a short-term rotation-based occupation to a more permanent one over time. At the pyramid temples, such alterations are relatively rare and not very obvious. For example, at the pyramid temple of Radjedef at Abu Rawash, there is some evidence for changes in the rectangular magazines but little evidence for changes at the mud-brick houses nearby.⁵¹

As far as terminology is concerned, none of the buildings that have been found at pyramid temple precincts can be considered examples for urban settlement. They should be understood as simple forms of accommodation used by small groups of people, including storage facilities, for the temple cult that possibly also functioned as administrative buildings. The term often encountered is “priests’ accommodations,” which also includes administrators and related temple staff. These installations are typical for the pyramid temple precincts and differ in many ways from permanent settlements in that they provide accommodation for only a small and restricted group of inhabitants of a relatively limited social rank and exclude larger groups – for example, families. They also lack installations for more permanent occupation, such as larger food production and storage facilities.

5.2.2 Workers' settlements and production sites

Evidence for more-or-less temporary settlements specifically related to construction work constitutes the second group, which is encountered in the royal cemeteries of the Memphite region. These sites appear in varying size and layout, are always relatively short-lived, and are tied closely to specific building work. As soon as the construction was completed, the workers' installations were abandoned.

The earliest installation of this category has been excavated near the Red Pyramid of Snofru at Dahshur, dating to the early Fourth Dynasty (Figure 5.8). It consists of one large mud-brick structure that can hardly be called settlement, and the excavators suitably named it "workhouse" (*Arbeitshaus*).⁵² The structure consists of a large open courtyard that measures 27 m by 38 m and is enclosed by a perimeter wall (Figure 5.9). During the excavations of this structure, several circular ovens for pottery production were found in the open area of the courtyard. The associated pottery dates exclusively to the early Fourth Dynasty and confirms the short period of use of this site. The pottery that was produced here is largely related to the construction work itself (large vats and jars for water and mortar) as well as vessels used for food consumption (carinated bowls, such as the well-known type of "Meidum bowls," plates, and other dishes). No evidence for the production of pottery needed for the funerary cult was discovered in this building. There are also no clear traces of any residential use of this workhouse. The same type of pottery has been found in association with barrack-like buildings (workmen's settlement?) discovered in the wadi south of the Red Pyramid; these two installations were probably closely related and the latter could have been the place used as accommodation for the workforce (Figure 5.8).⁵³ The abandonment of both sites is directly linked to the completion of the construction work at the pyramid. Both structures do not really form a real settlement; in each case they consist of a single building complex that might be a kind of predecessor structure to the larger and more complex installations that have been discovered, for example, in the Giza region.

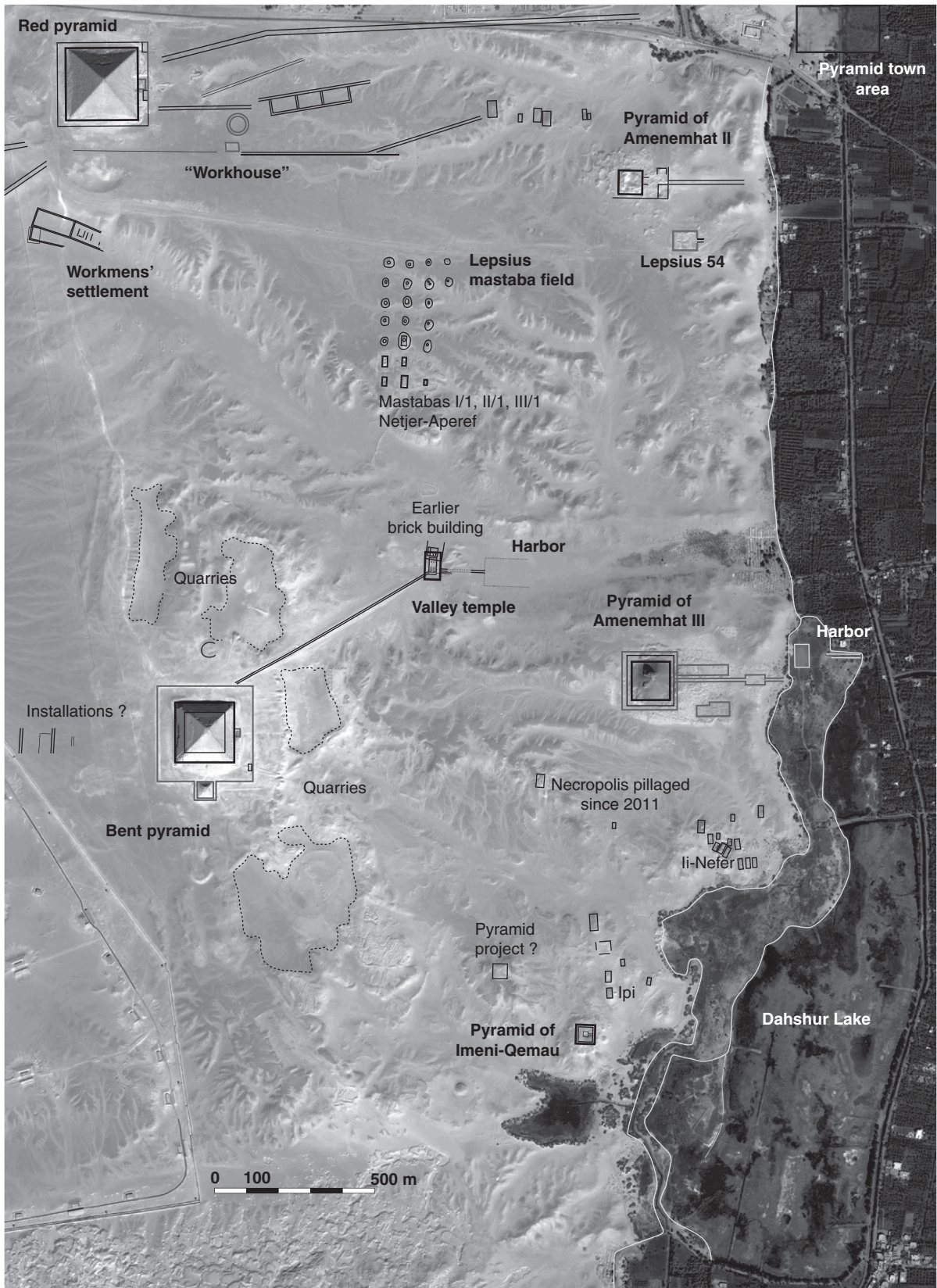
The extensive gallery compound at Heit el-Ghurab (see following) certainly belongs to this category of workers' installations too, but it is part of a much larger and complex settlement situated at the edge of the floodplain at Giza. Another installation of this category has been excavated south of the Menkaura pyramid (details

follow). Both sites date to the second half of the Fourth Dynasty. These settlements constitute specific support facilities that also included barracks for the accommodation of larger workforces and were closely linked to the royal construction projects. They were not long lived and were commonly abandoned as soon as the building work at the pyramid ceased. However, they usually included multiple elements and buildings used not only as accommodation for the people working there but also for manufacturing and production that can be witnessed by the presence of kilns and stone-working areas.

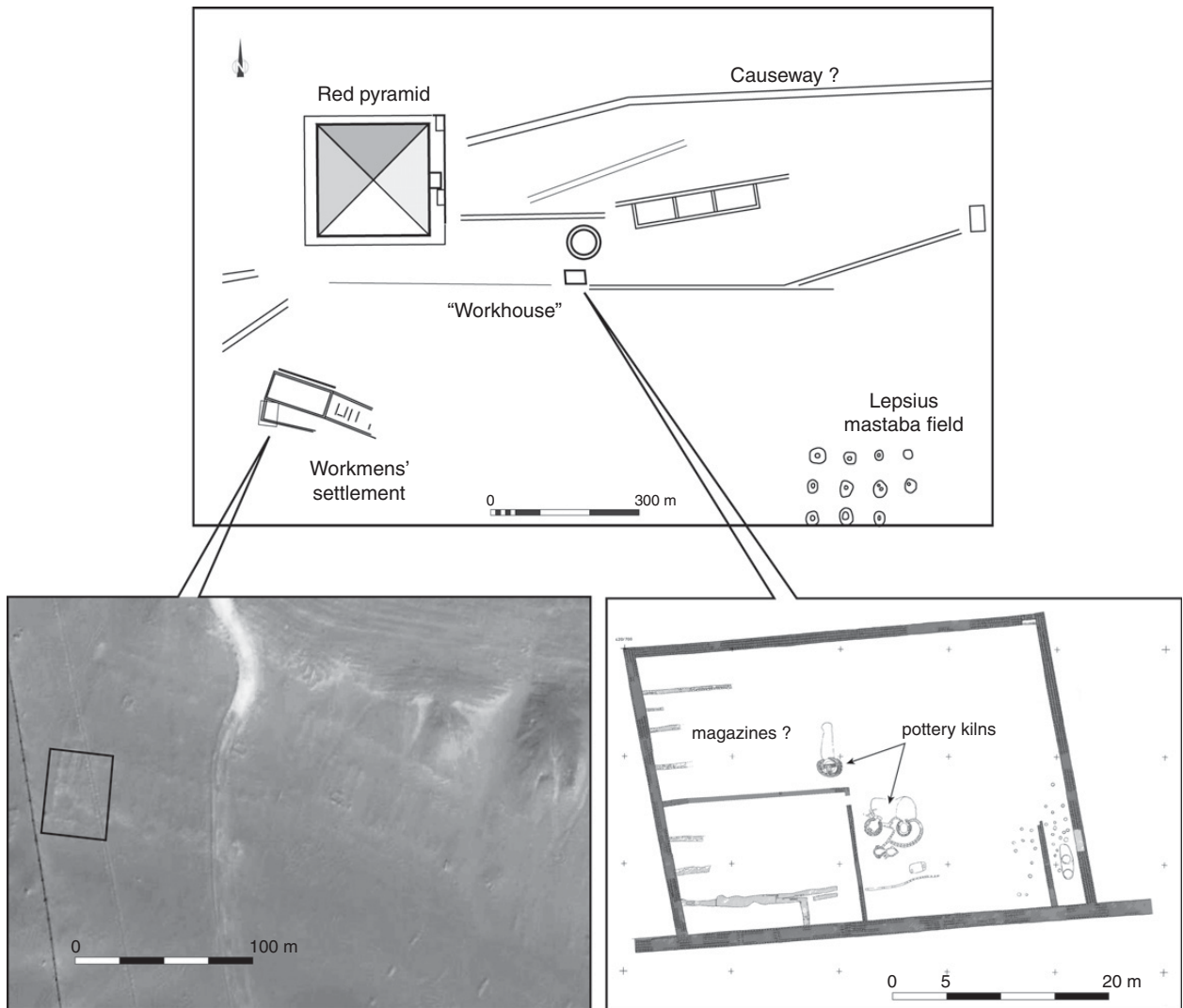
5.2.2.1 *The settlement of Heit el-Ghurab at Giza*

A large town has recently been excavated at Heit el-Ghurab, situated southeast of a modern cemetery at Giza. This site has been the main focus of excavations conducted by the Ancient Egypt Research Associates (AERA) – directed by Mark Lehner and his colleagues Ana Tavares and Mokhsen Kamel – for more than twenty years, and the work is ongoing (Figure 5.10). This extensive fieldwork has resulted in some remarkable discoveries concerning the function of various installations and settlements present at the site and in the surrounding area. Its current exposure covers an area of 5.25 ha, but its actual limits have not yet been reached.⁵⁴ This large town has allowed for a completely new evaluation of settlement in the Giza region.⁵⁵ It consists of different components based on different functions, organization, and layouts. Due to its complexity, it is difficult to fit the town as a whole into any specific category. However, its main purpose is closely linked to the royal building work of the Fourth Dynasty rulers in the Giza necropolis, and it is evident that the majority of inhabitants were involved in this work, though it includes more elements than usually encountered at a simple workmen's dwelling and production site. The archaeological data as well as textual sources such as the clay sealings found at the Pottery Mound⁵⁶ indicates the presence of a varied and complex society at Heit el-Ghurab, which seems to have clustered in different parts of the settlement.

After the initial discovery of several blocks of barrack-style constructions – in the so-called Gallery Complex (Figure 5.11), which lies just south of the monumental stone wall that inspired the name of the site, Heit el-Ghurab or "Wall of the Crow" – additional areas of dense settlement have been excavated. The Eastern and Western Towns spread south and east of the Gallery



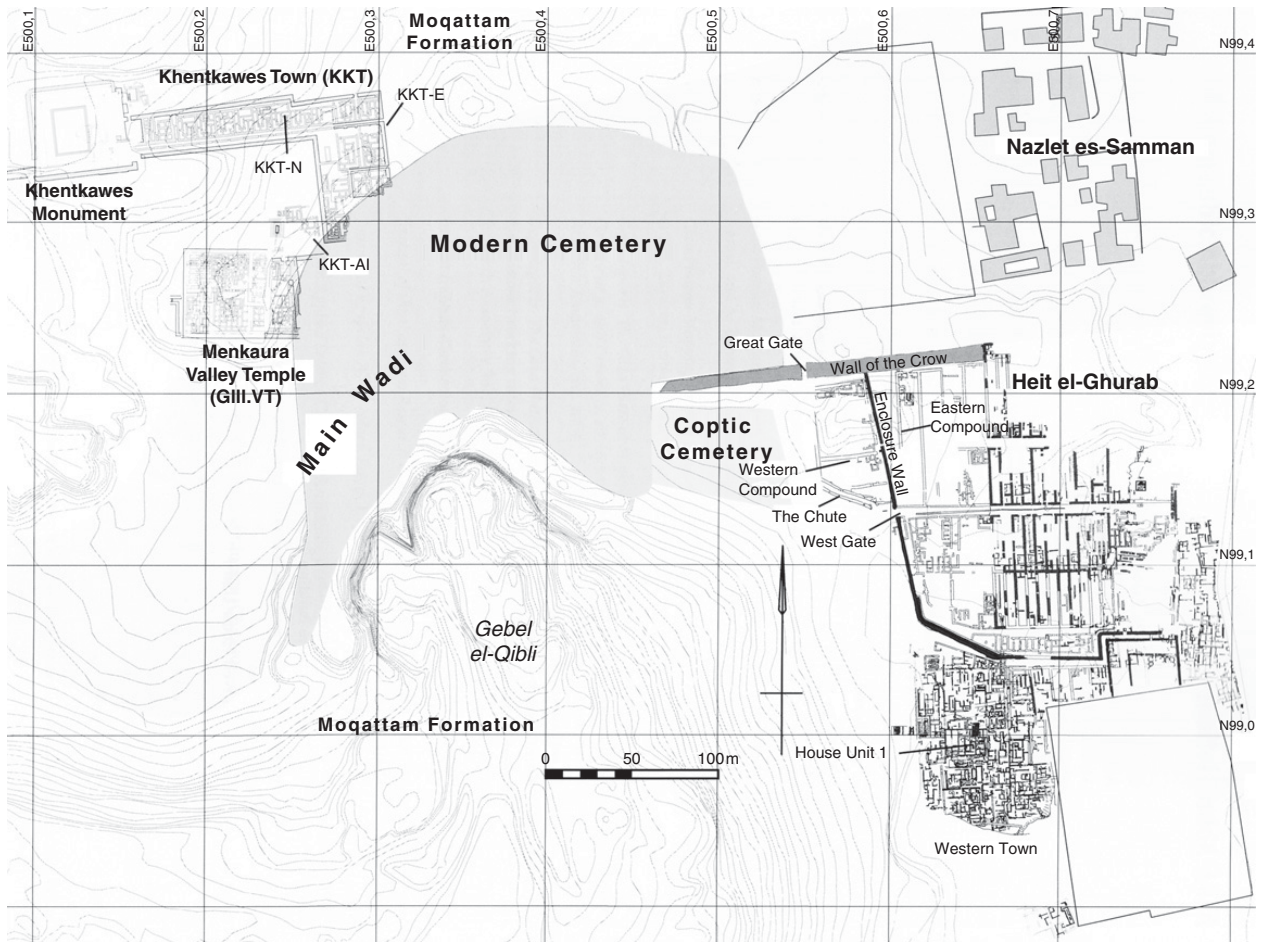
5.8. Map of the royal necropolis at Dahshur. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe.



5.9. Plan of the “workhouse” and remains of the workers’ settlement south of the Red Pyramid complex of Snofru (early 4th Dynasty) at Dahshur. By G. Marouard, after Stadelmann et al., “Pyramiden und Nekropole des Snofru in Dahschur. Dritter Vorbericht über die Grabungen des Deutschen Archäologischen Instituts in Dahschur,” *MDAIK* 49 (1993) 266, Abb. 4.

Complex and include various production areas and administrative buildings (Figure 5.11). The Western Town consists of larger houses, magazine buildings,⁵⁷ and production areas (pedestal building, bakeries). There is also evidence for administrative work being conducted here, which can be witnessed by the large number of clay sealings found within the Pottery Mound, a significant trash deposit near House Unit 1 in the Western Town (Figure 5.12). The mud-brick buildings are tightly clustered together, often sharing the same outer walls, and although the alignments of major wall sections seem to follow the orientation of the galleries further to the north, there is no indication for any

preplanned layout in this part of the settlement. The Eastern Town shows some of those characteristics too, but here it is possible to note a much more mixed alignment in different buildings that does not match any of the other areas in the Heit el-Ghurab settlement. The excavators remarked upon the smaller sizes of houses and house units as well as a noticeable increase in the number of storage facilities that were directly attached to them, often in the form of round silos. In between the Western and Eastern Towns lies a walled complex that has been called the “Royal Administrative Building” according to its large silo court and adjacent magazines (Figure 5.11). It probably served as a supply center for the more official



5.10. Plan of the Giza Plateau showing the locations of the Khentkawes monument, the Khentkawes townsite, the Menkaura Valley Temple, and the Heit el-Ghurab site. After M. Lehner (ed.), *Giza Plateau Mapping Project, Season 2009, Preliminary Report*, GOP 5, 2011, 8, fig. 1-1. © AERA, prepared by W. Wetterstrom and P. Sanders.

parts of the town such as the Gallery Complex, and its location near the production facilities, especially the large bakery installations just north of it, further underlines this connection. To what extent it also supplied the Western Town remains speculative.

5.2.2.1.1 The Gallery Complex

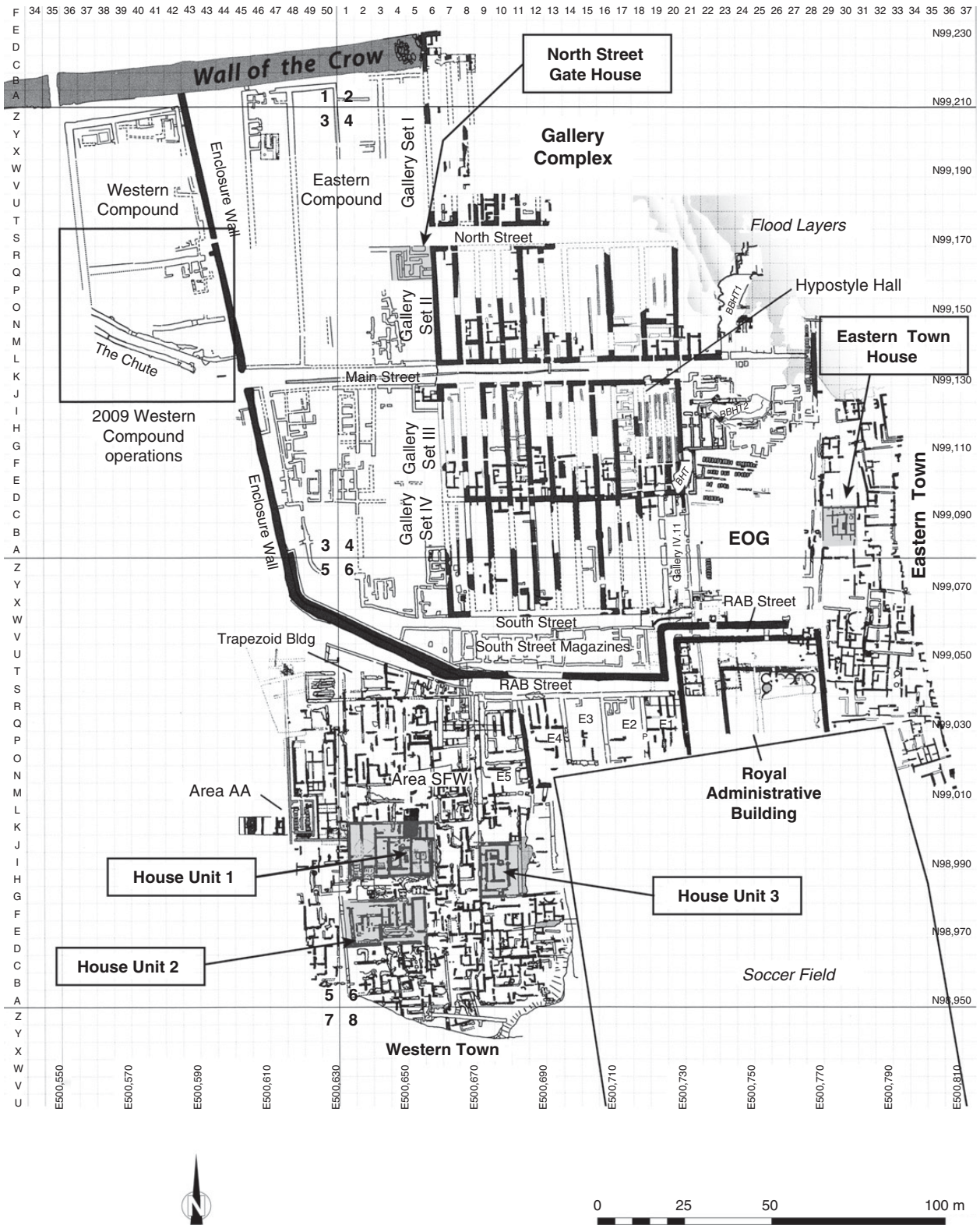
Just south of the large stone enclosure wall and also extending to the east of it, four sets of long galleries separated by three major streets running east to west have been excavated (Figure 5.11). Additional buildings made of fieldstones, as well as bakeries, flank the Gallery Complex on three sides – probably intended as further support and supply systems.

The galleries show a relatively standardized size and layout, with slight variations as to smaller details within

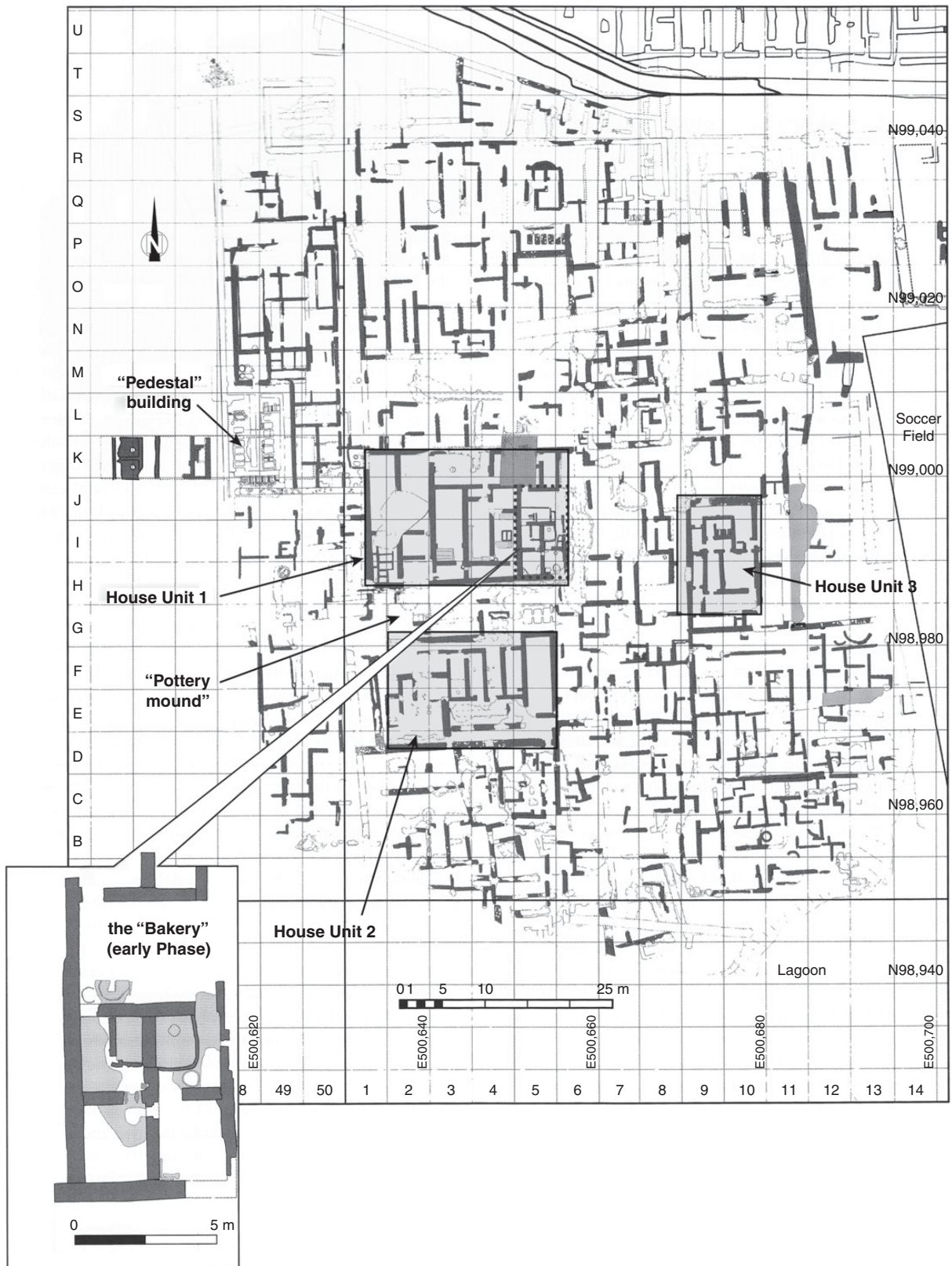
each gallery, but they were certainly built according to a common plan and accommodated a significant number of people.⁵⁸ Their respective lengths are between 34.5 m and 35 m, and their widths measure 4.5 m to 4.8 m. The internal organization falls into two parts: a large hall-like area with a colonnade in its center and a more residential unit consisting of several rooms in the rear (Figure 5.13).⁵⁹

A recent hypothesis proposes that the galleries even had a second floor, possibly with the purpose of providing additional accommodation. The thick outer walls, with the remarkable width of 1.57 m, would have had no problem supporting such a second floor, which would also explain the function of the long row of columns in the center of each gallery.⁶⁰ In addition, several slightly elevated and sloping platforms that could have been used for sleeping were noted on the gallery floors. At the rear part of each gallery, a more residential-style house unit

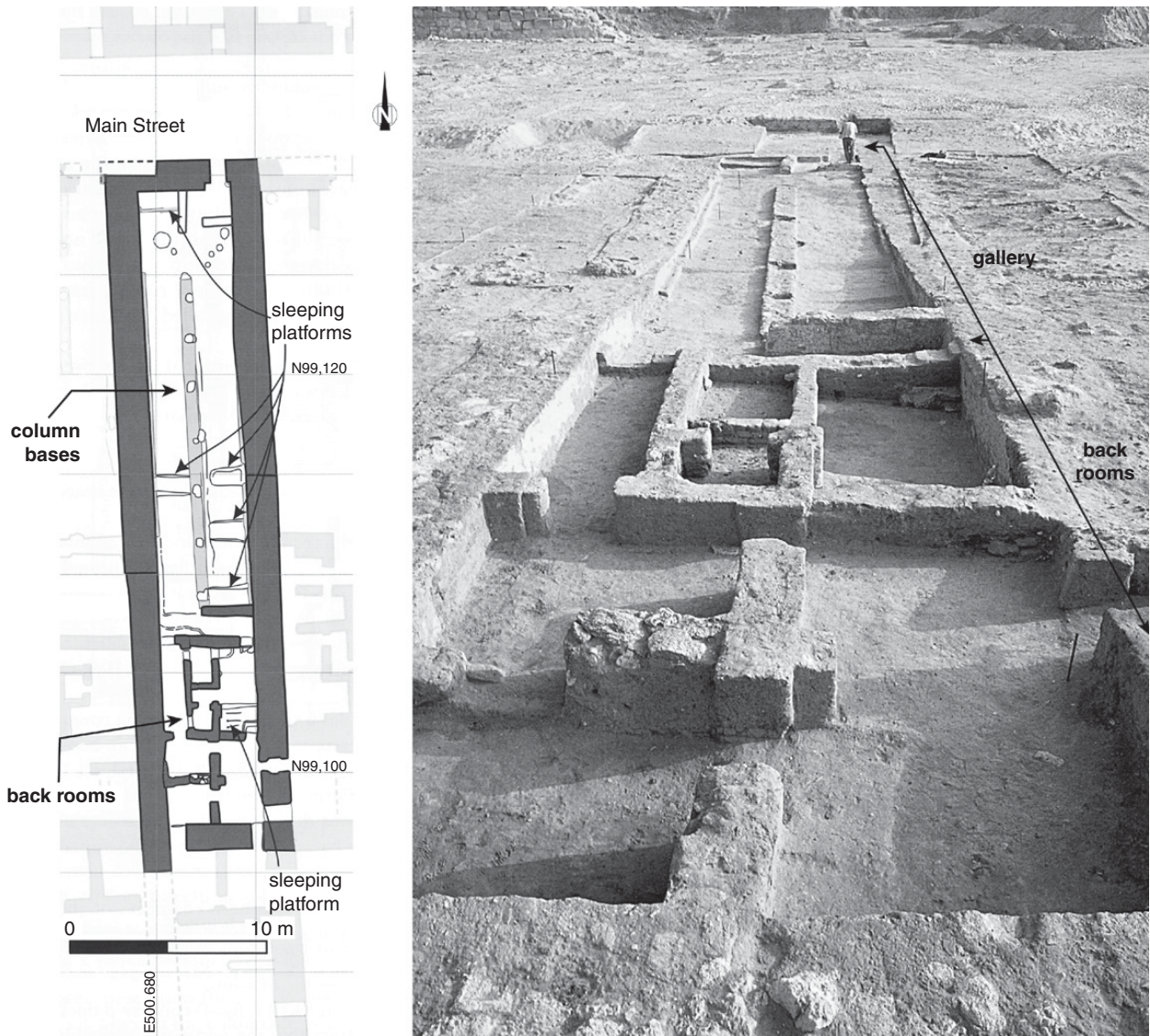
THE SETTLEMENTS OF THE OLD KINGDOM



5.II. Plan of the Heit el-Ghurab settlement (HeG) at Giza. After M. Lehner (ed.), *Giza Plateau Mapping Project, Season 2009, Preliminary Report*, GOP 5, 2011, 96, fig. 9.1. © AERA, prepared by P. Sanders, W. Wetterstrom.



5.12. Western Town section at Heit el-Ghurab (HeG), showing House Units 1 to 3. After M. Lehner (ed.), *Giza Plateau Mapping Project, Season 2009, Preliminary Report*, GOP 5, 2011, 132, fig. 13.1. © AERA, prepared by W. Wetterstrom and R. Miracle (AERA GIS).



5.13. Map and view of Gallery III.4 at Heit el-Ghurab (HeG). After M. Lehner, “The Pyramid Age Settlement of the Southern Mound at Giza,” *JARCE* 39 (2002), 38, figs. 5, 6. © AERA. Photo by M. Lehner, map prepared by P. Sanders, W. Wetterstrom.

was discovered. For example, in Gallery III.4, this rear unit consists of about nine rooms of various sizes, equipped with cooking facilities marked by hearths and areas showing traces of burning as well as a bed platform (Figure 5.13).⁶¹ This residential area might have been the accommodation for an overseer. In the central colon-naded part of the gallery, about forty people could fit comfortably, twenty on each side of the dividing line of columns.⁶² If there had been a second floor above it, this number could almost be doubled.

Thus, it seems reasonable to identify the overall function of the Gallery Complex as barracks for either a large

work or police force that was stationed here probably on a rotational basis.⁶³ Faunal remains recovered during the excavation of Gallery III.4 show that its residents were receiving meat provisions of sheep and goat as well as catfish, the latter in higher quantity than the former, which has been classified as typical for a “low status” diet.⁶⁴ This faunal evidence further corroborates the hypothesis that the galleries were to house large groups of people who received their food supply from a central authority, and this scenario fits very well with the interpretation of workers’ barracks. Bread, one of the main staple foods, was produced on site, as can be deduced

from the numerous bakery installations at Heit el-Ghurab. More than a dozen large bakery facilities have been discovered so far.⁶⁵

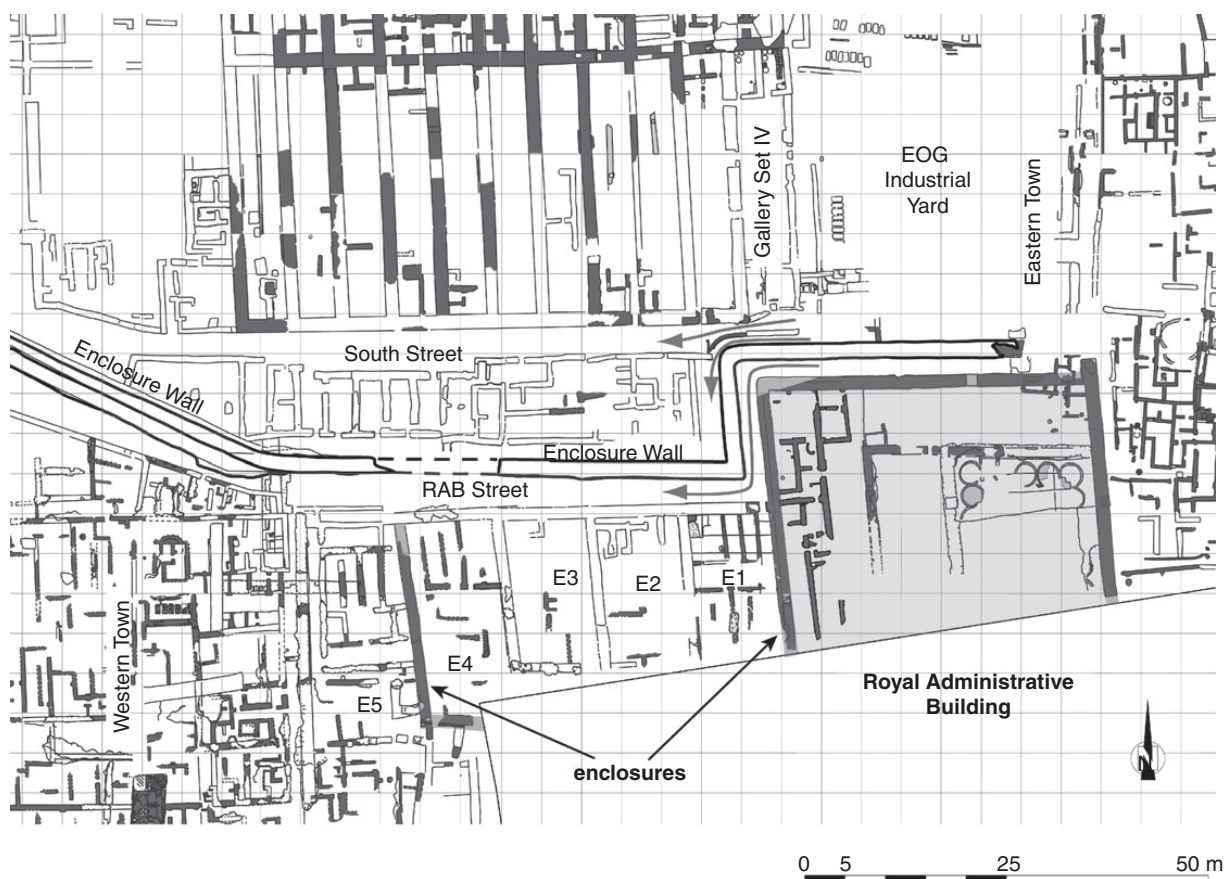
A food production area characterized by various installations such as bakeries and pedestals (EOG), probably used for malting, have been excavated in the area just east of the galleries and west of the Eastern Town (Figure 5.11). The complex stratigraphy in this part of the settlement comes from the dumping of large amounts of waste here and the construction, additions, and changes to various structures made of mud brick and fieldstone. This situation has left evidence for several consecutive phases of bakeries that had been built into a thick deposit of bread-mold debris and pedestals possibly intended for grain malting.⁶⁶

The Gallery Complex part of the town seems to have received much support from a well-established infrastructure, which was prepared to feed and accommodate a large number of people. Furthermore, the entire complex

was surrounded by a mud-brick enclosure wall on its western, southern, and eastern sides, with limited access points that helped impose strict control and monitoring of the comings and goings of people, which again indicates a state-run facility.

5.2.2.1.2 The Royal Administrative Building

The so-called Royal Administrative Building (RAB) is another noteworthy construction of official character, located immediately south of the enclosure wall of the Gallery Complex, from which it is separated by a thoroughfare called “RAB Street” (Figure 5.14). The RAB was surrounded by an impressive fieldstone wall that measured 2 m in width and served as major protection around the complex. The inside of the enclosure was not filled by a single building but consisted of open courtyards, magazines, storage areas, and a large silo court, with numerous round granaries that were sunk into the



5.14. Plan of the Royal Administrative Building (RAB) and surrounding areas at Heit el-Ghurab. After M. Lehner, A. Tavares, “Walls, Ways and Stratigraphy: Signs of Social Control in an Urban Footprint at Giza,” in M. Bietak et al., *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 205, fig. 24. © AERA, prepared by W. Wetterstrom and P. Sanders.

ground.⁶⁷ The modern soccer field to the south of the silos has unfortunately hindered any further exploration of the full extent and layout of the RAB. Apart from the large silo court, which probably held the grain storage for payments and food supply for the Gallery Complex, further evidence for its official character comes from the discovery of sealings naming Khafra and Menkaura.⁶⁸ The RAB has been interpreted as the central storage facility for the Heit el-Ghurab settlement. To the west of it, five modular enclosures contained further courtyards and magazines that might have been an extension of the RAB (Figure 5.14).⁶⁹

5.2.2.1.3 The Western Town

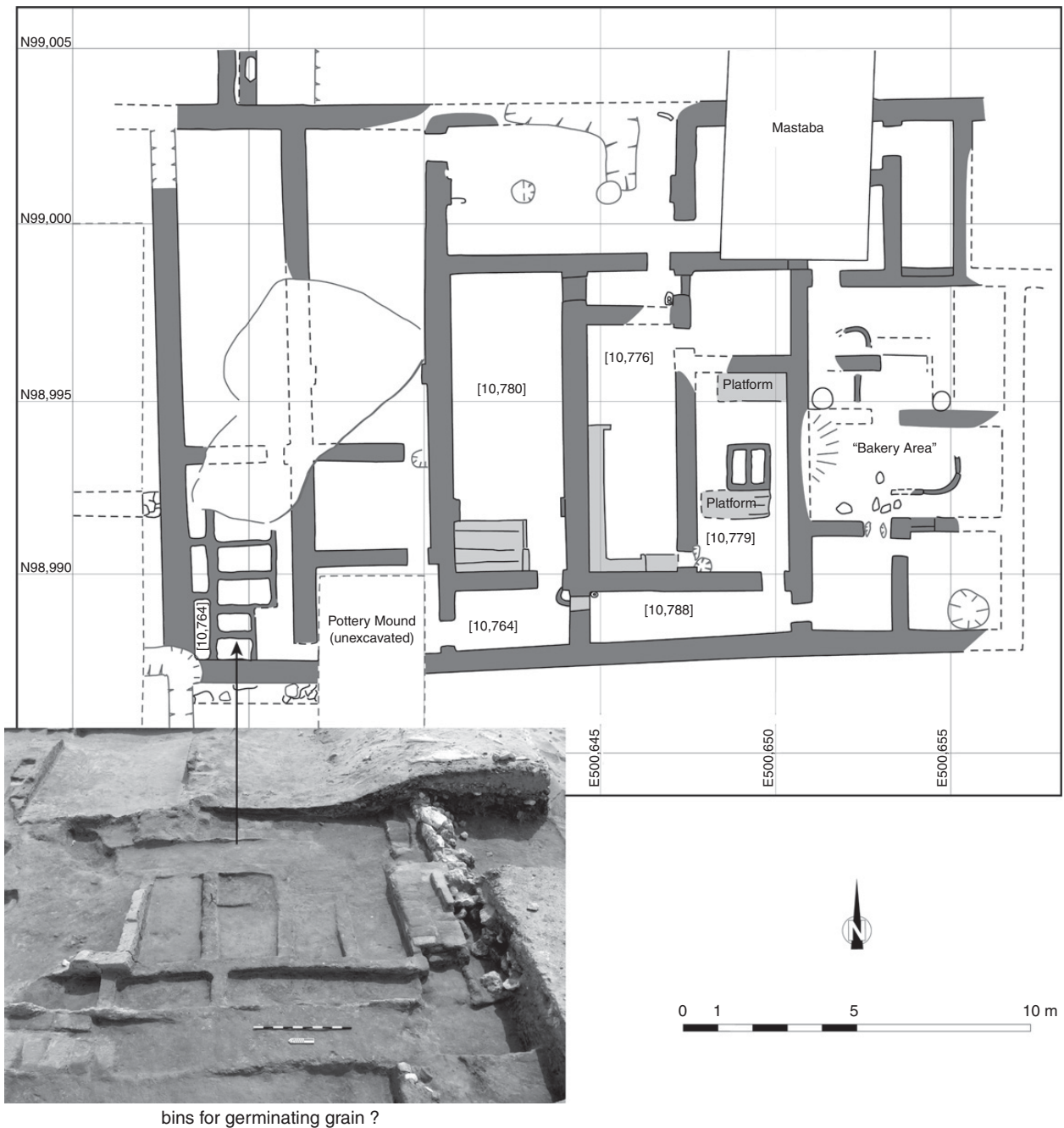
South of the gallery enclosure wall lies the so-called Western Town, which is marked by a densely packed agglomeration of mud-brick buildings that do not follow any specific orthogonal organization or repetition in their layouts. There is also no clearly marked system of streets and pathways except for one main street running in a north-south direction (Figure 5.12). This design stands in great contrast to the Gallery Complex, where the dividing streets are one of the main features. However, the overall orientation of major walls and buildings of these two distinct settlement areas seems to be much the same. This does not necessarily mean that a larger plan existed according to which the Gallery Complex and the Western Town were built. It is a likely sign of the two being contemporary and sharing major wall alignments, though. The Eastern Town, on the other hand, does not seem to share the orientation of the other two areas. This might be an indication for a secondary development or one that was more influenced by private initiatives only loosely linked to the more official parts and administrative functions of the town (Figure 5.11). However, the southern part of the Western Town also has a more crowded appearance, with smaller buildings built next to each other, resembling the conditions of the Eastern Town (Figure 5.12). It is possible that over time more inhabitants were attracted to settle here while working for the higher elite members and at the numerous production facilities that can be found in different areas of the settlement.

Despite the difficulties of defining any building units that formed one house, it has been possible to distinguish several large buildings or housing units in the Western Town. House Unit 1 comprises the largest building complex that has been fully excavated; it covers an area of

about 400 m² and has about twenty-one rooms (Figure 5.15). It had been well constructed and consists of spacious rooms with carefully prepared mud floors as well as walls showing a decoration of colored bands of plaster (according to fragments of painted plaster found in the debris covering the floors). The innermost room had two platforms with a small installation of two double compartments or bins made of mud brick in the center (Figure 5.15: 10,779), while another rectangular room on the western side shows an L-shaped bench built against its western and southern walls (Figure 5.15: 10,776). Behind it lay probably another bedroom, this time with a double platform, presumably also used for sleeping (Figure 5.15: 10,780).⁷⁰ The latter room seems to have been kept relatively separate from the other rooms and was only accessible through a doorway on its southern side. The main entrance into the building was probably also located toward the south of House Unit 1 and led through a small vestibule (Figure 5.15: 10,764) into the southern corridor, from which other parts of the building could be accessed.⁷¹

Along the eastern side, a group of rooms called the “bakery area” had been used for bread and beer production (Figure 5.15). Those were kept quite detached from the core rooms of House Unit 1, and for most of the occupation, the access to the bakery area was from the north and not directly connected through any of the core rooms of Unit 1.⁷² Two rooms on the southern side of the bakery unit formed a separate group according to the specific access patterns observed by the excavators. They were not linked by any doorways to the adjacent rooms and were accessible only through the southern corridor (Figure 5.15: 10,788) during Phases 1 and 2 of the occupation. In fact, the bakery and brewing area shows a much more complex stratigraphy than the central, residential part of House Unit 1. This is not surprising because the floor levels grew quickly due to accumulating ash from the ovens and hearths – a typical phenomenon for bakery installations. The ash was not rigorously cleared out and was instead left to accumulate inside the rooms. By the last phase of occupation, the floor level in this area lay 60 cm above one of the core rooms. The archaeological evidence also indicates that this part of the house was constantly being used and frequently adapted to include minor additions and changes to its internal layout, reflecting the needs of the people working there.

The analysis of faunal remains excavated at the Pottery Mound provides further insight into the lifestyle of the inhabitants of House Unit 1.⁷³ In contrast to other parts of



bins for germinating grain ?

5.15. Plan of House Unit 1 (4th Dynasty) in the Western Town at Heit el-Ghurab. After M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project: Seasons 2006–2007, Preliminary Report*, GOP 3, 2009, 87, figs. 36, 38. © AERA, photo by Y. Kawae, map prepared by W. Wetterstrom.

the Heit el-Ghurab settlement, the mound's faunal remains contained predominantly cattle – especially bones from young animals.⁷⁴ The ratio of cattle in comparison with sheep/goat is markedly higher here than in

the Gallery Complex. The presence of an elevated number of hind legs could be an indication that part of the supply to the Western Town came from offerings that were destined to the mortuary cults in the necropolis and

then consumed by the elite in charge of these cults. Furthermore, faunal fragments of wild animals such as gazelle and oryx were also recorded, suggesting that the inhabitants of this part of town had hunting privileges. These results shed new light on the elite diet at the time, which was composed of high-quality meat, a great contrast to the poorer diet indicated by the faunal record from the Gallery Complex.

5.2.2.1.4 The Pottery Mound at the Western Town

At the Heit el-Ghurab settlement, over a thousand broken clay sealings were discarded into the open space between House Units 1 and 2 in the Western Town, indicating the presence of an official administrative building in the immediate vicinity. Even though the stratigraphic analysis of the so-called Pottery Mound – the name of this large trash dump – shows that most of it was dumped here when the southern corridor of House Unit 1 had fallen out of use and into disrepair,⁷⁵ the origins of the various finds within the dump need to be reconsidered. First, the large amount of broken beer jars found in the Pottery Mound might be somehow related to the food production area attached to House Unit 1 or alternatively beer jars could have been received in a similar fashion as the hind legs, namely from the provision of offerings. Secondly, the broken sealings show a relatively restricted repertoire of motives and inscriptions principally associated with scribal institutions – for example the “scribe of royal documents” and the “scribes of the king’s writing case.”⁷⁶ Sealings of this type were only found in this area and therefore must stem either from House Unit 1 or 2. Neither of the two houses has any obvious architectural features that would characterize it as “official” or “administrative.” House Unit 2, which is of similar size to House Unit 1, features four elongated rooms in a row as a central feature, reminiscent of magazines.⁷⁷ Evidence from the sealings themselves and the recorded back-types show traces of the majority having been attached to wooden boxes and papyrus documents.⁷⁸ However, it is difficult to establish whether there was sealing activity carried out in the vicinity or whether the sealings stem from the delivery of sealed boxes and documents that were opened here after having been sent from someplace else. The archaeological data provides evidence for both activities, suggesting the presence of an official institution here.⁷⁹ This scenario would fit with the presence of a large mansion with residential units (House Unit 1) but also a food production area

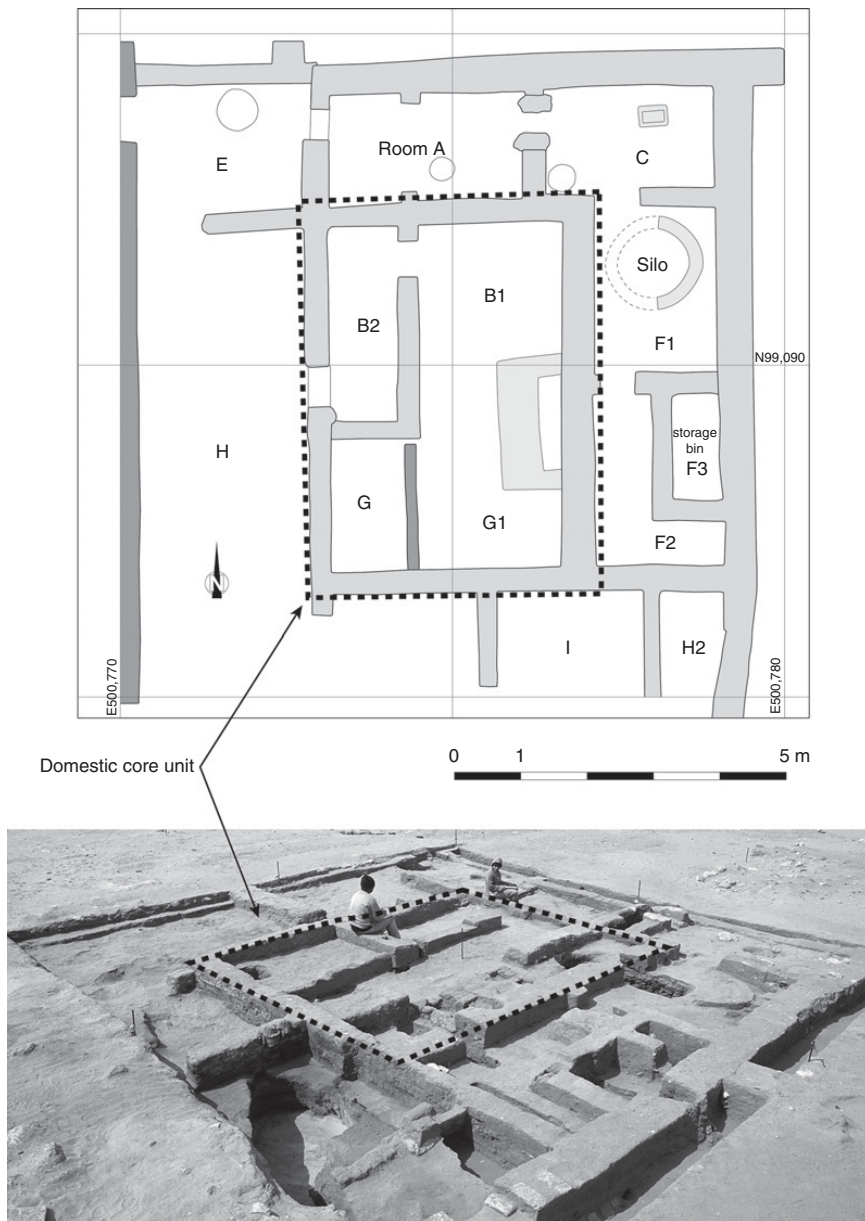
(Pedestal Building⁸⁰ associated with the malting of grain; bakeries and brewery) and adjacent magazines for storage of goods (House Unit 2) (see Figure 5.12).

A last point of discussion is the long L-shaped bench in the center of House Unit 1 (Figure 5.15: 10,776). Is it possible that this was for official use and that despite the presence of a so-called master bedroom as part of the core unit (Figure 5.15: 10,780) suggesting residential use, administrative activities were carried out here too? The answer to this question must remain tentative: it is clear from the architectural layout alone that it is difficult to establish the exact function. Interesting results that further underline the use of these buildings by officials and the elite were obtained through the faunal analysis.

5.2.2.1.5 The Eastern Town

East of the Gallery Complex and the RAB lies the Eastern Town, which can be distinguished from the Western Town by the smaller houses or housing units (Figure 5.11). The mud-brick buildings are similarly tightly packed, without any organized street plan, but the orientation of the mud-brick walls seems much more random than in the Western Town. The faunal remains included pig bones, a sign that the inhabitants were to some extent self-sufficient in terms of food supply.⁸¹ This observation is further supported by evidence for individual storage installations attached to the houses in the form of the occasional round silo and a large amount of grinding stones. One of the houses, the Eastern Town House, has been fully excavated (Figure 5.16). It is thought to be of residential character and shows a plan of rectangular rooms in the center that form a core unit surrounded by larger rooms and open areas. The general appearance of the Eastern Town has been characterized as like a “village,”⁸² which is also supported by the evidence for storage facilities and the faunal remains, again indicating that the owners were relatively self-sufficient. The inhabitants seem to have belonged to a lower social status than those of the Western Town. They were living in smaller houses that show no traces of administrative work, there are no obvious signs for a hierarchy among the buildings, and there is evidence for a different protein source (pig) and diet in comparison with those of the occupants of the Western Town.

Lacking up to now are traces of a perimeter or enclosure wall. The precise degree to which the inhabitants of the Eastern Town were linked to the central



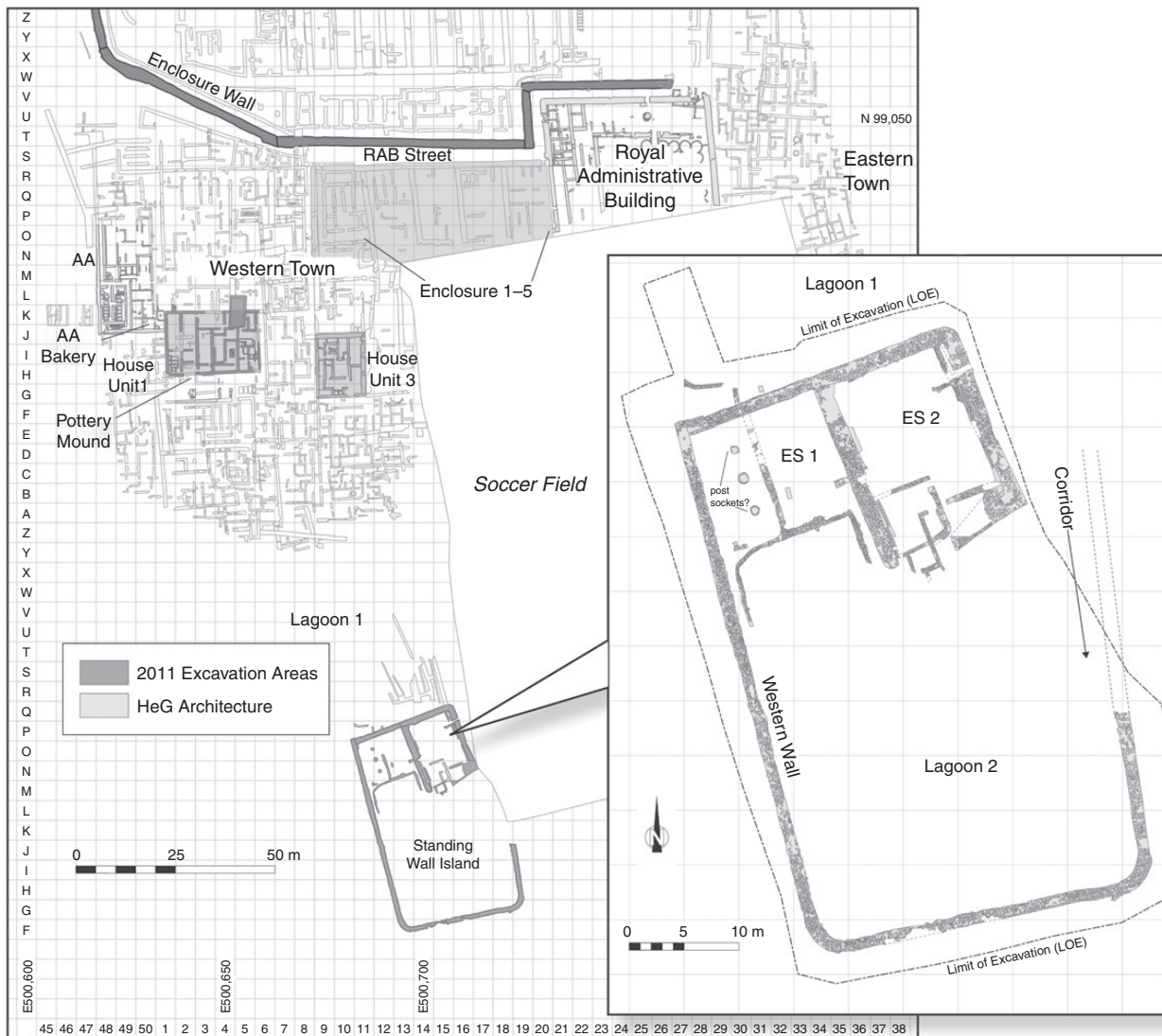
5.16. Plan and view of the Eastern Town House, Eastern Town at Heit el-Ghurab (the core domestic unit is outlined with a dotted line). After M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project Season 2004, Preliminary Report, GOP 1*, 2009, 17, figs. 8, 9. © AERA, Photo by M. Lehner, map prepared by J. Jarrett.

government – a connection that is more obvious at the Western Town due to the information that can be gained from the sealing corpus – is still unclear. However, the fact that this part of the settlement developed on the eastern side of Heit el-Ghurab, close to the large production area, might be a sign that a significant number of inhabitants had been involved in activities relating to bread making, malting, and other food-related production work. The inhabitants of the Eastern Town were

certainly closely associated with the rest of the town, and it is possible that they settled in this area because of the emerging opportunities and advantages of living adjacent to the large state foundation.

5.2.2.1.6 Cattle corral

South of the Western Town and just to the west of the modern soccer field, an elevated area with stone walls



5.17. Plan of the “Standing Wall Island” (a cattle corral?), south of the Western Town at Heit el-Ghurab. After R. Redding, “The OK Corral: Standing Wall Island Mystery, Solved,” *AERAGRAM* 12.1 (2011), 3. © AERA, prepared by R. Miracle (AERA GIS) and W. Wetterstrom.

(Standing Wall Island), a conspicuous landmark, has been recognized (Figure 5.17). In 2011, the whole area was investigated archaeologically, revealing two stone enclosures (ES 1 and ES 2). Immediately to the south of them are two waterlogged depressions (Lagoons 1 and 2). During the fieldwork, it was possible to follow the stone walls farther south and discover that they encircled Lagoon 2 (Figure 5.17). This rather unusual construction of a perimeter wall with rounded corners that surrounded a large open space (35 m long and 25 m wide) has been interpreted as a corral for cattle. It could have been used for more than 50 and up to 500 animals, depending on

whether they were just kept inside the enclosure on a short-term basis before slaughter or whether they were left to graze. This discovery fits well with the results of the faunal analyses from the town area, which estimated that 11 cattle and 37 sheep/goats were slaughtered on a daily basis to feed the inhabitants.⁸³

Although the settlement at Heit el-Ghurab is a multi-component site, it also contains the principal elements of an industrial/production site related to the royal construction work at the pyramid complexes. Its lifetime is mainly confined to the Fourth Dynasty, which is another sign of the very specific purpose that dictated its

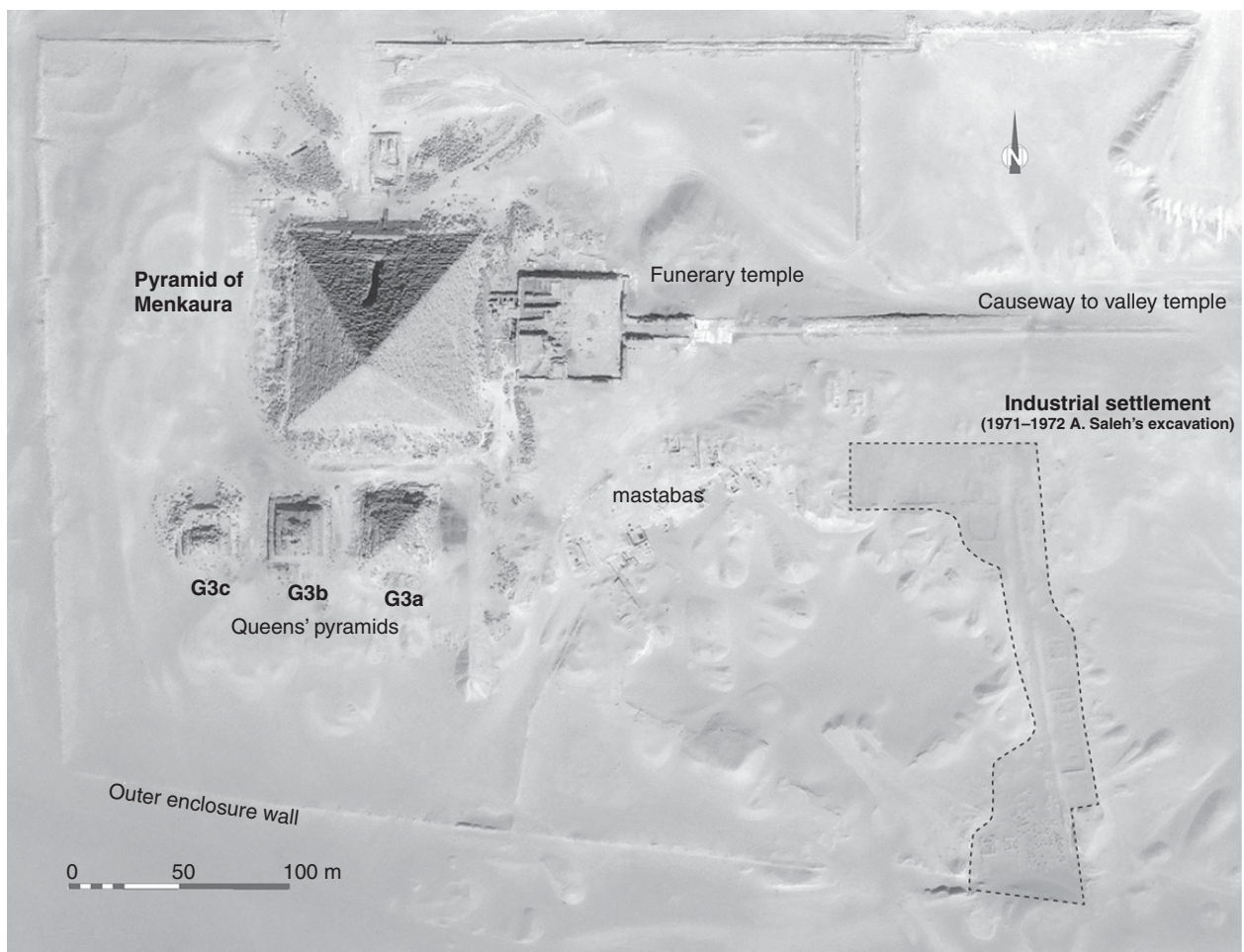
development and existence.⁸⁴ It is currently the most complex town that has been found in relation to the great pyramids, the adjacent temples, and the private cemeteries at Giza.

5.2.2.2 *The industrial settlement south of the Menkaura pyramid at Giza*

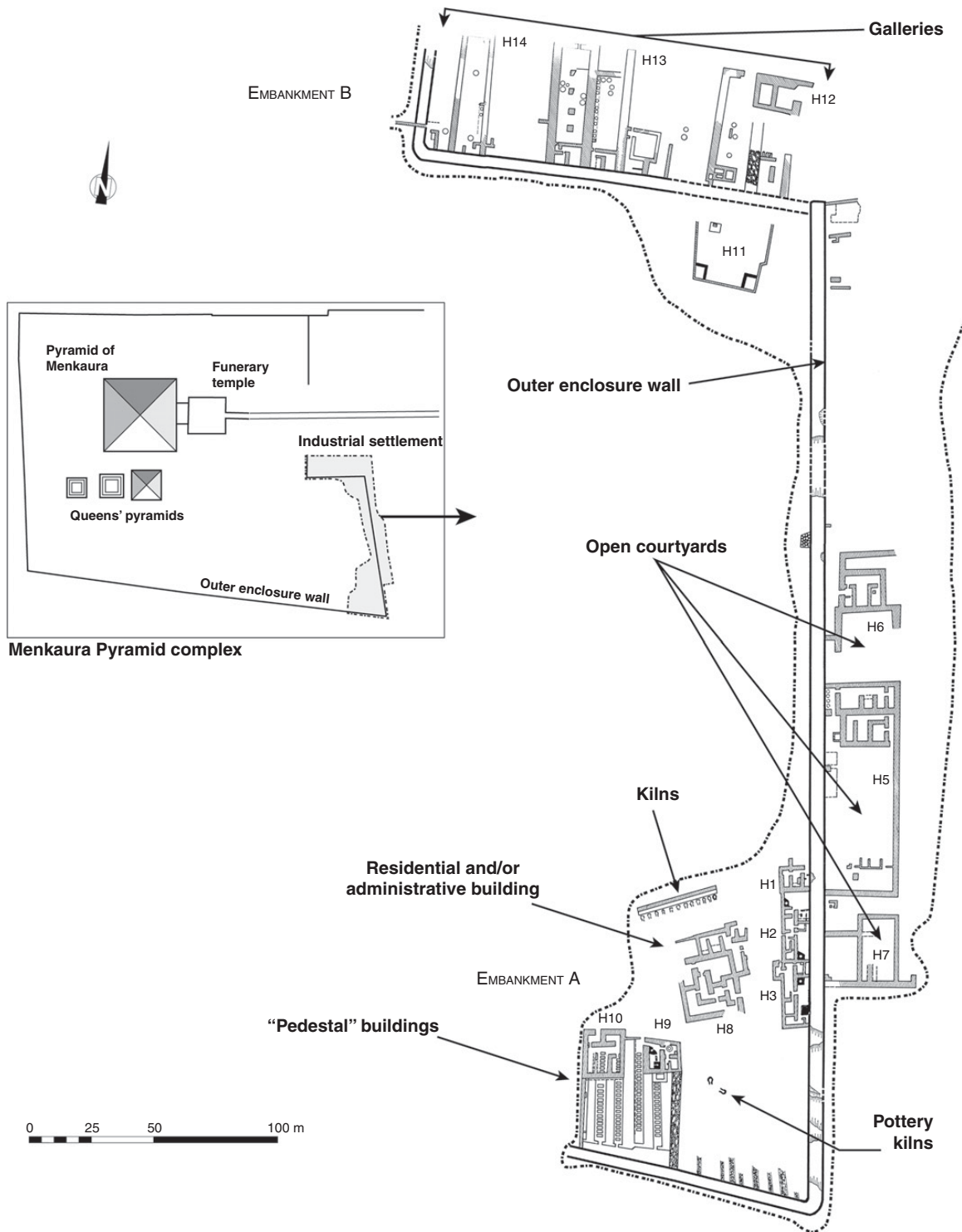
A University of Cairo mission in 1971–1972, under the direction by Abdel Aziz Saleh, excavated additional settlement remains, part of a production or work site.⁸⁵ These structures are situated southeast of the Menkaura pyramid complex and stretch along the edge of a large quarry used for the exploitation of stone blocks for the construction of the pyramid (Figure 5.18). A long stone enclosure runs in a north–south direction for about 207 m, with a thickness of 2.9 m, and then turns in a

curve to the west at its southern end (Figure 5.19). Another element of this enclosure has been found at the northern part of the site, running in a western direction for about 80 m before turning north again. The buildings excavated here are situated on both sides of the enclosure wall, making it difficult to determine which side of the wall is the inside and which the outside. Its full purpose is not clear, and it seems that some elements might have been lost.

The individual buildings are mainly made of fieldstone, using the available construction debris, and were founded upon quarry waste, which covers the ground here. The published plan by Saleh shows three distinct areas of settlement, each with different types of installations (see Figure 5.19). Along the northern side, five elongated, barrack-style buildings can be seen that somewhat resemble the galleries at the Heit el-Ghurab settlement, but



5.18. Satellite view of the Menkaura pyramid complex (4th Dynasty) at Giza with the location of the industrial settlement. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe.



5.19. Plan of the industrial settlement south of the Menkaura pyramid complex (4th Dynasty) at Giza. By G. Marouard, after A. Saleh, "Excavations around Mycerinus Pyramid Complex," *MDAIK* 30 (1974), fig. 2.

they are much smaller and less well preserved (H12–14).⁸⁶ They also seem to have had a comparable “residential” unit consisting of several rooms at the rear. The eastern side of the settlement is occupied by three buildings that are marked by large open courtyards (H5–H7). These seem to have functioned as workshop areas.⁸⁷ A row of four ovens was excavated along the enclosure wall (Figure 5.19). Southwest of the enclosure, three different types of building complexes have been excavated. Structures H9 and H10 are characterized by numerous pedestals arranged in four rows. They resemble closely the pedestal installations found at Heit el-Ghurab, but again, they are less preserved in this case.⁸⁸ A few meters to the northeast of the pedestals, a larger building was excavated that might have functioned as a residential and/or administrative unit (H8). Two pottery kilns occupy the open space just south of it (Figure 5.19). North of H8, a row of twelve kilns was found, but it is not clear what kind of production these were used for.⁸⁹ To the east side of H8 there is a row of buildings that are abutting the enclosure wall (H1–H3). Parts of them might have had residential functions according to a “sleeping” platform noticed in H1, while several large ovens in H2 and H3, probably for bread, suggest the production of food items (Figure 5.19).

This whole settlement area has been characterized as “industrial” according to the various production facilities described previously. It seems to date exclusively to the Fourth Dynasty and is probably related to the royal construction works at the Menkaura pyramid complex. Even though only a small part of it was recoverable, this site shows several parallels to installations excavated at the Heit-el Ghurab settlement – for example, the galleries, the bakery installations, and the pedestals.⁹⁰ This archaeological evidence provides another good example of the kind of settlement that can be found closely related to the building work of the royal mortuary complexes.

None of these settlements should be classified as urban, and the term “construction and production site” seems to be most appropriate – more so than “workmen’s camp” or “village,” because there are more elements to it than just buildings providing accommodation and showing signs of domestic use. The full complexity of such settlements can be clearly recognized at Heit-el-Ghurab.

5.2.3 The settlements at the Valley temples in the Memphite region

The settlements associated with various Valley temples in the Memphite region form another category. They are

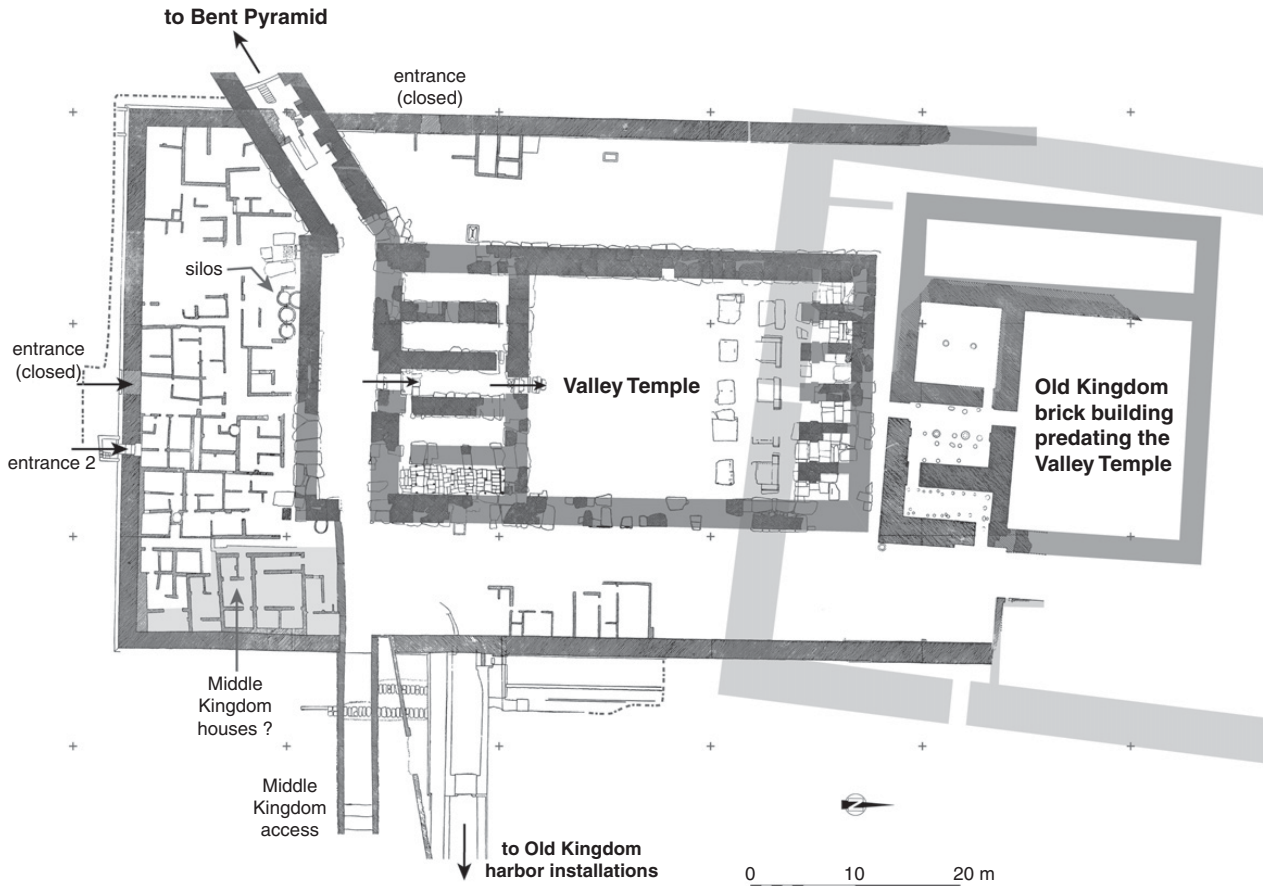
much more complex and on a different scale in comparison with the priests’ accommodations outlined in previous sections. Their layout and elements also differ significantly from those encountered at industrial/production sites.

Three sites have been chosen for this analysis. One concerns the oldest “Valley” temple site at Dahshur, which is linked to the Bent Pyramid and is one of the most frequently cited examples of a settlement of the early Old Kingdom (Figure 5.8). The two other sites are situated in Giza: the settlements linked to Queen Khentkawes’ mortuary complex and the Menkaura Valley Temple (Figure 5.10). The latter two sites have been excavated and published with a high degree of detail; they have also been integrated into a wider archaeological fieldwork project directed by AERA. These examples have the advantage of a great deal of available data, allowing for a better evaluation of the nature and characteristics of such settlements.

5.2.3.1 *The settlement at the Valley temple of the Bent Pyramid at Dahshur*

One of the oldest and frequently cited examples is the settlement excavated by Ahmed Fakhry at the mortuary temple complex linked to the Bent Pyramid at Dahshur, which dates to the reign of Snofru, first king of the Fourth Dynasty. The temple is situated halfway along the causeway leading from the pyramid complex to the Nile Valley and constitutes a somewhat unusual case because its location in the middle of the desert is quite peculiar for a Valley temple.⁹¹ Other cult buildings have also been found in the precinct of the Bent Pyramid proper that qualify as part of the pyramid temple and related facilities. Since the Bent Pyramid complex belongs to one of the earliest examples of “true” pyramid complexes and represents a new stage in the development of royal mortuary architecture in the early Old Kingdom – after the “step” and “layer” pyramids of the Third Dynasty – it is not surprising to encounter this slightly unusual setting at Dahshur.

The Valley temple complex of Snofru’s cult lies 0.68 km northeast of the Bent Pyramid and about 1 km from the current edge of the floodplain. Its main feature is a large limestone temple measuring 47.5 m by 27.5 m, orientated to the north (Figure 5.8).⁹² Its stone walls have a thickness of about 2 m. A mud-brick enclosure wall 1.8 m thick surrounded the entire temple complex (Figure 5.20). In the space between the stone temple and the enclosure wall, various mud-brick buildings



5.20. Settlement remains along the southern side of the Valley temple at the Snofru Bent Pyramid complex (4th Dynasty) at Dahshur. By G. Marouard, after A. Fakhry, *The Monuments of Sneferu at Dahshur. Volume II. The Valley Temple, Part I*, Cairo 1961, fig. 4.

were found during the excavations of this site by Ahmed Fakhry, from 1951 to 1952. The principal location of the Old Kingdom houses has been identified at the southern side of the temple, south of its main entrance, in the area between the temple wall and the mud-brick enclosure wall, which provides a space measuring about 760 m².⁹³ These rather fragile-looking mud-brick structures, with their thin walls that are only 0.3 m to 0.4 m wide, stand in great contrast to the impressive white limestone temple construction and must have been even more conspicuous when the temple was complete, with its decoration and statues (Figure 5.20). Because of this contrast, it has been questioned whether the mud-brick buildings were part of the original layout of the temple precinct or if they are a later addition – an important point of discussion that needs to be investigated in some depth.

The occupational history of Snofru's Valley temple is rather complex. Fakhry notes in his report that after a

period of abandonment during the First Intermediate Period, the site saw an important reoccupation during the Middle Kingdom, as can be witnessed by numerous stela and statue fragments.⁹⁴ In Fakhry's final report from 1961, he states that the southern area was occupied by the houses that were contemporary to the Fourth Dynasty temple. He interprets them as having served the priests as dwellings even though among them were also storage installations for the temple in the form of mud-brick silos, of which four have been found in a building leaning against the exterior of the southern stone wall of the temple (Figure 5.20). However, in Fakhry's earlier report from 1952, he clearly distinguishes between mud-brick buildings of the Middle Kingdom, which covered most of this area, and the underlying earlier brick structures that belong to the Old Kingdom phase.⁹⁵ These two phases of occupation are shown together on the same plan without any differentiation between the phases, which are separated by a considerable amount of time. Both Richard

Bussmann and Barry Kemp use this plan for the reconstruction and identification of the Old Kingdom houses and house units as well as for drawing conclusions about their inhabitants. Bussmann's justification for considering all these buildings as dating to the Old Kingdom comes from the published pottery assemblage, which shows the typical repertoire of the Fourth to the Sixth Dynasty. Most of the material was found in trash dumps outside the mud-brick enclosure wall.⁹⁶ The majority of the published pottery, however, does not show the characteristics of the early Fourth Dynasty, but rather those of vessel types dating later, to the second half of this dynasty.⁹⁷ In the preface of the publication of finds from Snofru's Valley temple, Fakhry explains that he and his colleagues had less than three weeks to put together the manuscript for final publication, for which they had originally planned to take a complete year. W. Kelly Simpson, who was in charge of the pottery, states explicitly that there was much Middle Kingdom material but that he chose to mainly publish the Old Kingdom assemblage.⁹⁸ Another indication that the published site plan contains multiple occupation phases can be deduced from the position of the main access ways into this southern part of the temple complex. On the plan there is no direct access from the interior of the temple precinct into the southern area because of a mud-brick wall running east to west that seems to be a prolongation in the direction of the causeway to the east, which leads toward the Nile Valley (Figure 5.20). This is certainly a later addition, probably of Middle Kingdom date, as it completely blocks any access to the houses from the direction of the temple area. Originally this gate must have been open – also indicated by the space along the other sides on the interior of the temple enclosure. Furthermore, on the same plan there are two entrances marked on the southern stretch of the mud-brick enclosure, and Fakhry explains that apart from the first entrance, which was blocked up during the Middle Kingdom, a new entrance was made 5 m to the east of the latter (Figure 5.20). Neither entrance, however, leads to any pathway, open court, or street through the southern mud-brick enclosure, but instead is blocked by mud-brick walls. This could not have been the original situation. The buildings in front of the second entrance must date to the earlier phase of the Old Kingdom unless we are dealing with a third period of occupation that is not being mentioned for this part of the temple. These details show clearly the problems associated with this particular settlement, which make most interpretations and analyses as to its

organization and inhabitants extremely difficult. Contrary to previous interpretations, it is not possible to draw any conclusions about the interconnection between houses, their layouts, and the identification of groups or house units and associated access ways and streets.

The date of the original foundation of these houses to the south of Snofru's Valley temple complex is also unclear. As outlined earlier in this chapter, the pottery evidence supports a later Fourth Dynasty dating than that of Snofru's reign, but there remain uncertainties about the completeness of the pottery publication even as far as the Old Kingdom material is concerned. As the situation stands now, the presence of Old Kingdom pottery dating to the Fourth Dynasty in addition to later material of the Sixth Dynasty seems to argue against these buildings being entirely later additions and intrusive in character.

The available archaeological evidence so far suggests that there was a group of mud-brick buildings occupying the southern area of this temple already during the Fourth Dynasty, and other ones of this period might have existed around the other sides of the temple too. These buildings seem to have covered a range of functions from domestic/residential use to administrative and storage installations. The building complex with the four round silos could almost certainly date to the Old Kingdom; a close parallel in terms of layout has been noted by Fakhry at the northeast corner of the Bent Pyramid complex.⁹⁹ Fakhry interpreted this mud-brick building – characterized by a row of four round silos along the western side and three rectangular magazine-like rooms on the southern side – as an Old Kingdom storeroom facility. He notes that the mud-brick module used for this building is of the same size as those used for the second phase of the pyramid temple and related structures found in the actual pyramid precinct, which dates to the later part of Snofru's reign.¹⁰⁰ Such a storage facility was clearly supporting the cult carried out at the pyramid itself, while the comparable structure at the more distant Valley temple complex is more difficult to interpret and could also have served as storage facility for the local community. From the other finds discovered during the excavations, there is also evidence for flint and stone tools at the structures south of the Valley temple, indicating that some manufacturing activity had been carried out there – probably related to the upkeep of the temple cult.¹⁰¹ Evidence for food consumption and offerings comes from a large dump of pottery along the exterior of the southern section of the mud-brick enclosure wall. The presence of the typical Old Kingdom bread molds and beer jars (more than 3,000

vessels have been counted of the latter type, as well as most other shapes that are commonly found also in other towns of this period) suggests the more or less permanent occupation of this site, probably by entire families. The few published small finds, which mainly include flint and stone tools, seem to be similar to what has been encountered at other installations near the pyramid temples and therefore do not provide any more-detailed information about the inhabitants. Of course it is not always entirely possible to separate those residues that were left over from food consumption, offerings and storage activities for the ongoing statue cults performed in these temples from the waste deposits generated by the priests and other staff members who were stationed there. To some extent, it might not even be appropriate to separate those too strictly from each other, because many of the offerings would be redistributed to the temple personnel.¹⁰²

That administrative activity was carried out at the site is witnessed by the discovery of forty-two clay sealing fragments naming the Fifth Dynasty rulers Userkaf, Neferirkara, and Niuserre, which were found discarded to the east of the Valley temple. Those finds also indicate a continuous functioning of this temple during the Fifth Dynasty.¹⁰³ However, it has not been possible to identify the exact location where such activity would have been conducted. As already mentioned, the precise function of a building cannot always be deduced from its architecture alone. There is much evidence that seemingly residential houses were also used for administration, implying that these structures served several purposes.

As far as the evidence for any intrusiveness of mud-brick buildings at the site is concerned, there is no indication that the Fourth Dynasty mud-brick houses to the south of the main temple were later additions by temple staff who started to settle there on a more permanent basis than before. The way the entrances into this section of the temple site have been designed – with proper stone thresholds in addition to the presence of Fourth Dynasty material – it is most likely that these buildings were conceptualized as an inherent part of the temple complex. The later occupation level above the Old Kingdom houses is related to a revival of Snofru's cult activity during the Middle Kingdom.

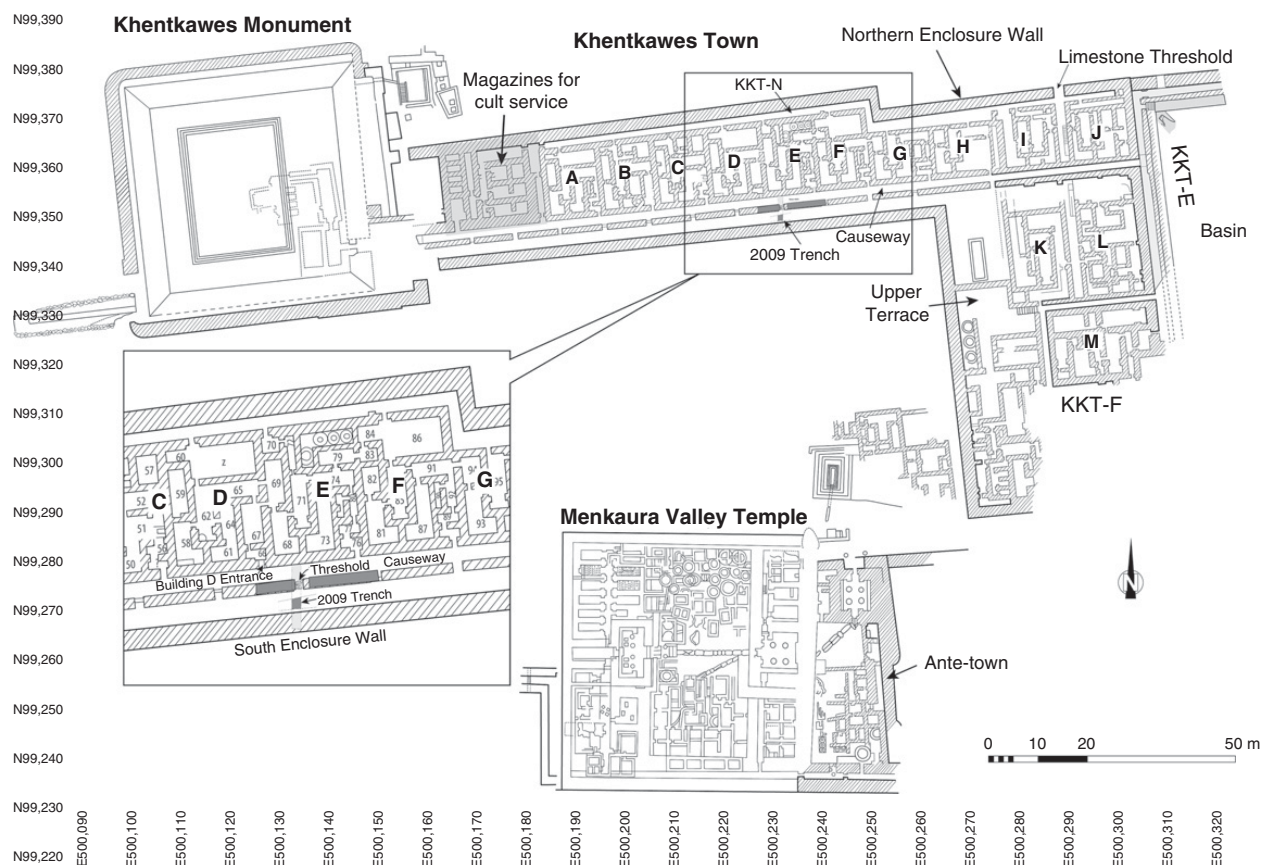
5.2.3.2 *The settlement at the mortuary complex of Queen Khentkawes at Giza*

The Khentkawes settlement is an L-shaped one consisting of orthogonally planned mud-brick houses and streets,

adjacent to the large mastaba tomb of Queen Khentkawes dating to the late Fourth Dynasty. The settlement was an integral part of the mortuary complex and included numerous mud-brick buildings and storage installations covering an area of more than 6,000 m². To the east, it is directly linked via ramps and stairs to a large basin cut into the natural bedrock (Figure 5.21). The site was occupied until the end of the Old Kingdom with relatively few alterations and additions made to the mud-brick buildings, and there is no evidence for an intrusive installation of new structures to the already existing ones.

The Khentkawes town is an interesting and much-cited example: the earliest preplanned and orthogonally laid-out settlement discovered in Egypt so far and associated with the mortuary complex of Queen Khentkawes, who lived at the end of the Fourth Dynasty.¹⁰⁴ The queen's actual tomb is an unusual construction in the form of an enormous mastaba made of two elements.¹⁰⁵ The lower part is an almost-square platform, measuring 45.5 m in length and 10 m in height, that was cut from the natural limestone bedrock. On top of it, eleven courses of limestone blocks were added so that the monument has a total height of 17.5 m. The funerary chapel was incorporated into the superstructure of the mastaba at its southeastern side. A long causeway of about 150 m leads to the chapel entrance along an east–west axis, providing a dramatic setting for the complex (Figure 5.21). On the eastern side of the mastaba, the first mud-brick structure, encountered after passing a large open court, consists of a group of magazines and storage facilities that were serving the funerary cult of the chapel.¹⁰⁶ These structures are perfectly aligned with the row of houses that extends further to the east, but they are visibly separated from the houses by a narrow corridor and stand out by their thicker walls in comparison (Figure 5.21). The actual settlement was directly linked to the mastaba via the causeway and stretches in an L-shaped form farther to the east and then turning south. Its southern end lies very close to the Valley temple of Menkaura, another complex with an associated settlement (Figure 5.21).

The Khentkawes settlement is currently the largest found in relation to the funerary cult for a queen, and some scholars have even been tempted to call it a “city.”¹⁰⁷ The whole Khentkawes mortuary complex, including the settlement, was first excavated in 1932 by Selim Hassan, who published a detailed plan of the site that is still the main reference.¹⁰⁸ Since then, interpretations about its architecture, function, and general layout



5.21. Plan of the Khentkawes town and the Menkaura Valley Temple (4th Dynasty) at Giza. After M. Lehner, et al., “Re-examining the Khentkawes Town,” in H. and N. Strudwick (eds.), *Old Kingdom, New Perspectives. Egyptian Art and Archaeology 2750–2150 BC*, Oxford 2011, 148, fig. 4. © AERA, prepared by C. Mazzucato (AERA GIS).

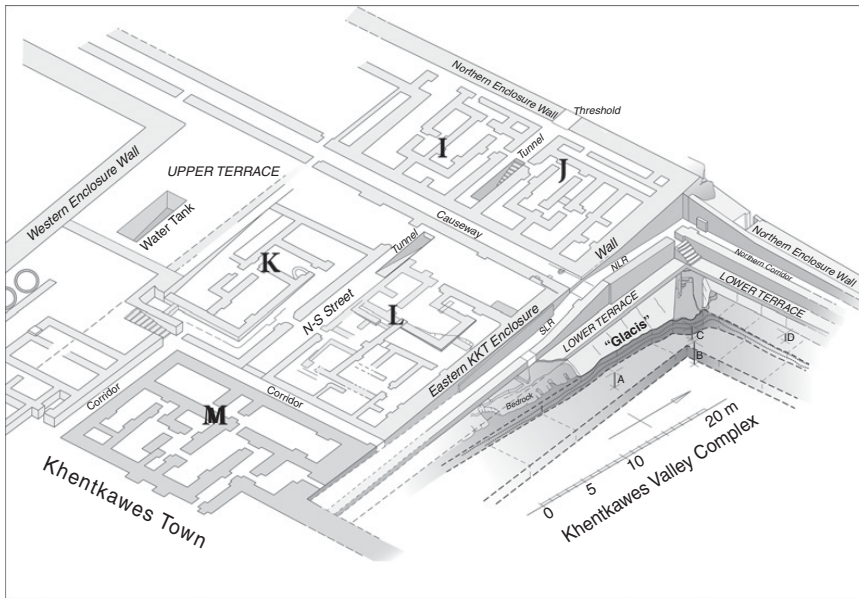
have appeared in numerous studies on the settlements and domestic architecture of the Old Kingdom.¹⁰⁹

Hassan identified three main elements of the town.¹¹⁰ To the west and linked directly with the queen’s mastaba via a causeway running east to west lies a row of six houses (buildings A–F) showing almost identical layouts (Figure 5.21). Each of them measures about 12 m by 15.7 m. At the eastern end of this row, four smaller houses (G–J) on Hassan’s plan can be seen connected to the buildings in the south via an underpass, because the causeway leading to the mastaba is separating this area from the southern portion of the town (Figure 5.22a). Three larger buildings in the southeast, which Hassan termed “mansions” (buildings K, L, and M), form the part of the “foot” of the L-shaped settlement, with an upper terrace to the west of buildings K to M that was equipped with a water tank and storage installations (Figure 5.21).

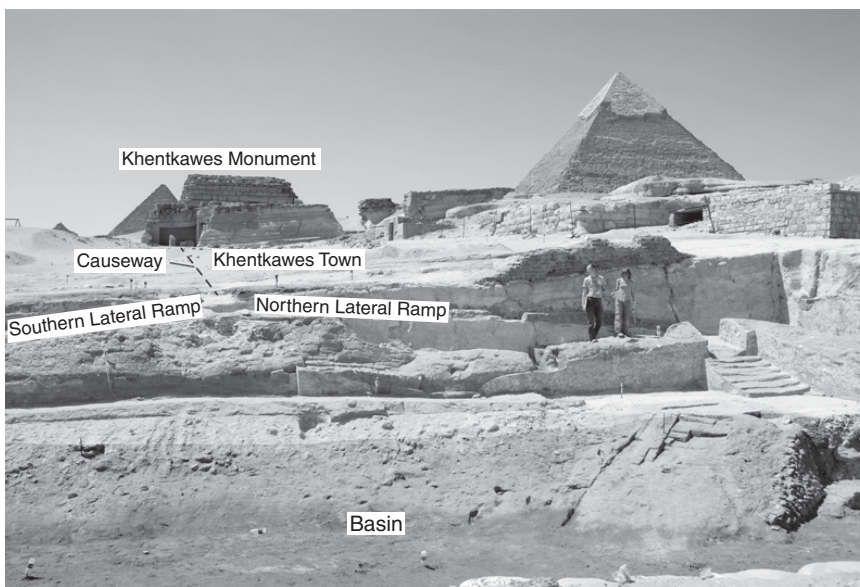
From 2007 onward, this settlement has been the focus of new excavations as part of the Giza Plateau Mapping

Project directed by Mark Lehner, who believes in an intricate connection between this area and the neighboring community located at Heit el-Ghurab, located farther east.¹¹¹ The reinvestigation of the site has provided a considerable amount of new information as to the architectural phases and stratigraphic details that are crucial for a more precise assessment of this town – information that is often missing for the numerous other settlements in the royal necropolis. In addition, the Giza Plateau Mapping Project also investigated the possible link of the Khentkawes complex to the nearby Menkaura Valley Temple.¹¹² The new archaeological results concerning the interface between the Khentkawes town (KKT) and Menkaura Valley Temple (MVT) show that these sites functioned concurrently.

The recent excavations by AERA provide evidence for several phases of the settlement, with the earliest part being situated in the northeastern corner, encompassing buildings I to L (Figures 5.22a and b). These four



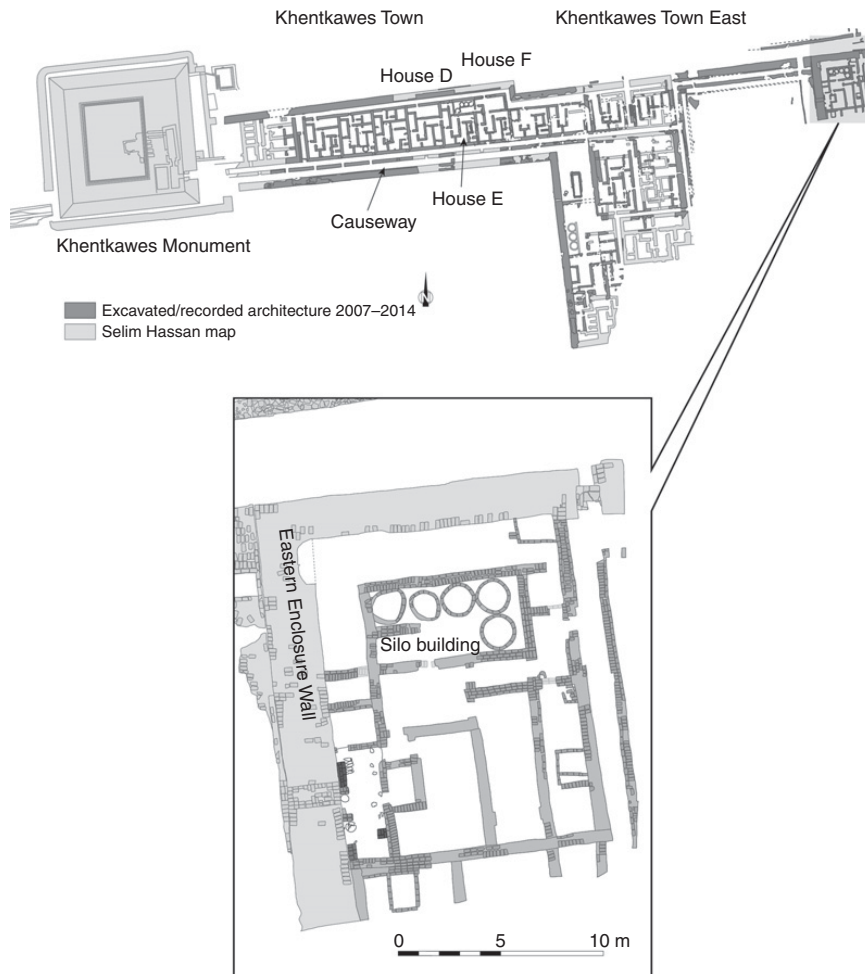
5.22a. Isometric reconstruction of the lower approach to the Khentkawes town and the basin area. After M. Lehner, et al., “Re-examining the Khentkawes Town,” in H. and N. Strudwick (eds.), *Old Kingdom, New Perspectives. Egyptian Art and Archaeology 2750–2150 BC*, Oxford 2011, 161, fig. 15. © AERA, original isometric by M. Lehner, digitized by A. Witsell, and colored by W. Wetterstrom.



5.22b. View of the eastern part of the Khentkawes town and the basin in the foreground. After M. Lehner, et al., “Re-examining the Khentkawes Town,” in H. and N. Strudwick (eds.), *Old Kingdom, New Perspectives. Egyptian Art and Archaeology 2750–2150 BC*, Oxford 2011, 160, fig. 14. © AERA, photo by M. Lehner.

buildings existed as a group before the east–west causeway to Khentkawes’ tomb was built and show a north–south alignment with two main streets running along each side of the houses (Figure 5.22a). When the later

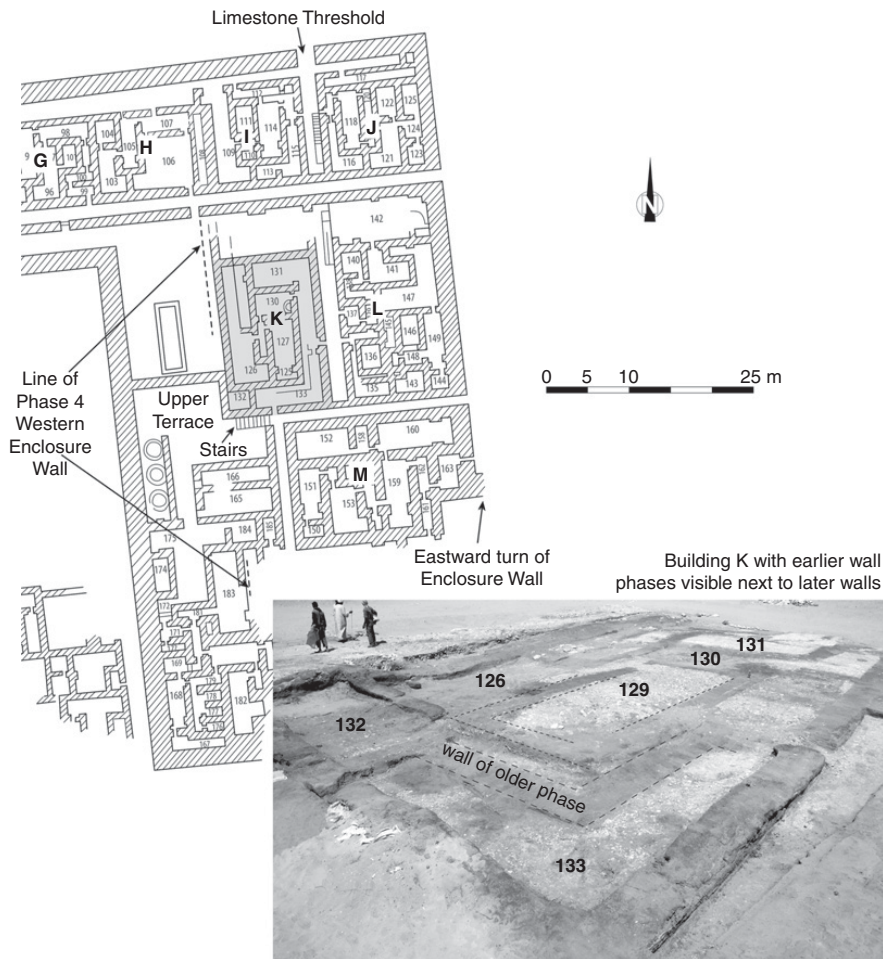
causeway was constructed, an underpass had to be built in order to keep using the north–south street that connects buildings J and I with buildings K and L.¹¹³ It seems that there is good reason to believe that this earliest phase of



5.23. Plan of the Khentkawes town, from the pyramid (west) to the lower town (east), and the settlement remains east of the basin newly discovered by the AERA excavations. © AERA, prepared by R. Miracle (AERA GIS).

settlement was founded before the mortuary complex of Khentkawes had been constructed.¹¹⁴ The reinvestigation of building K revealed the presence of earlier walls belonging to an older phase of this building (Figure 5.24). Lehner and his team have suggested that the structures were of administrative character and seem to have stood in close relation to the large basin on their eastern side (Figures 5.22a and b).¹¹⁵ The access ramps and terraces certainly show that the basin was part of these installations, as well as pathways that were carefully constructed along the northern side of it and leading to another stretch of settlement on the east of the basin (Figure 5.23).¹¹⁶ Lehner suggests that buildings J–L had an official function to support the building work, especially major stonework activities at both the Menkaura and Khentkawes complexes.¹¹⁷

The main occupation phase of KKT is characterized by the completion of all the various parts of the settlement. According to the layout and location of the mud-brick buildings, different functions have been assigned to the long east–west settlement area consisting of the residential buildings A to J (separated on the southern side by the causeway from the other mud-brick buildings, K–M) and installations on the upper terrace that have been interpreted as the administrative/official part of the town (Figure 5.24). The settlement quarter that is situated on the southern side of the causeway had been assigned an official or administrative character already by Hassan, who emphasized the installation of storage installations, granaries, and the water tank on an upper terrace (Figures 5.22a and 5.24).¹¹⁸ Three round silos were found to the west of the larger open courtyard, which was also occupied by two

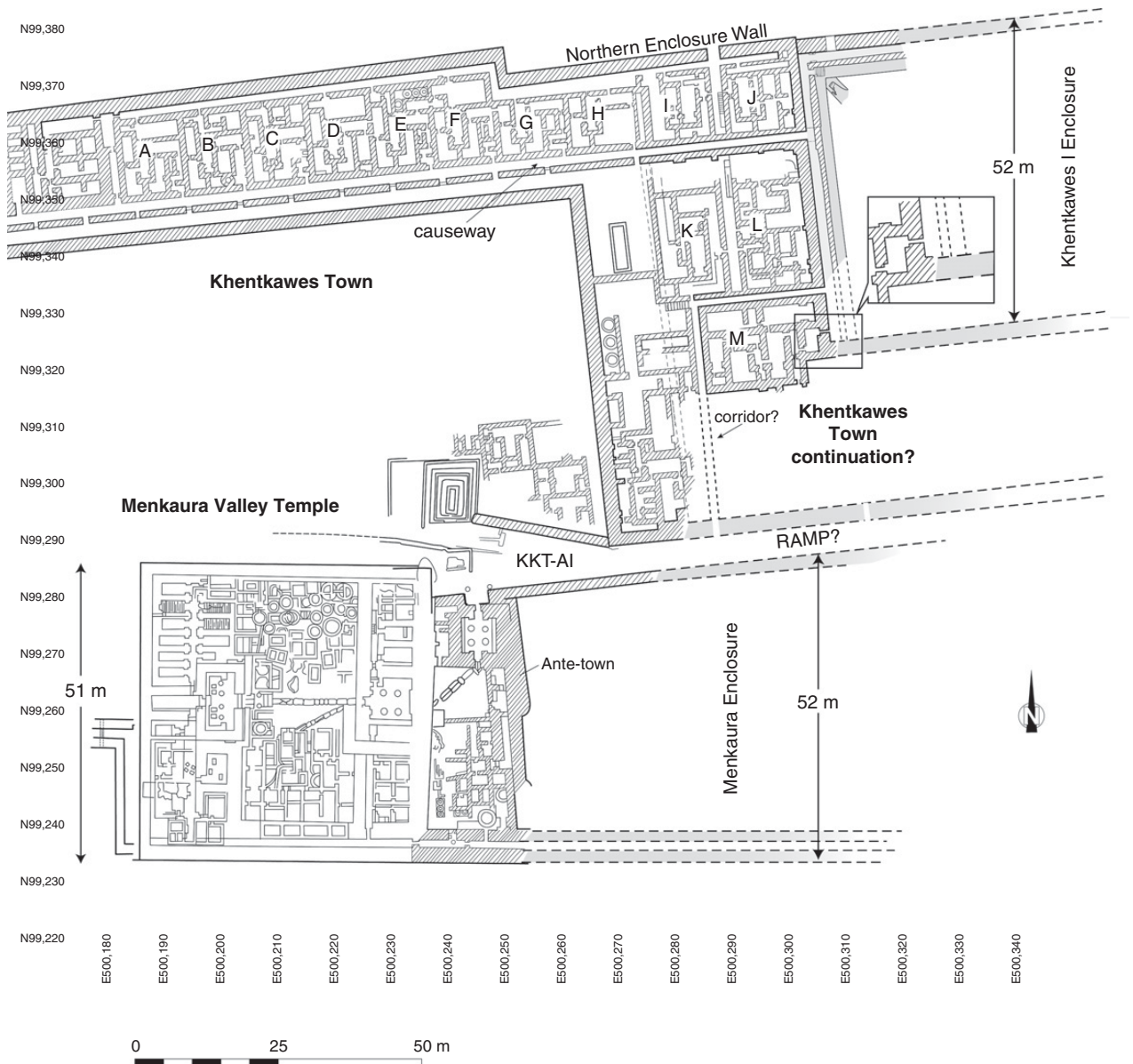


5.24. Southern part of the Khentkawes southern town showing the location of Building K. After M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project: Season 2008. Preliminary Report*, GOP 4, 2009, 17, fig. 8; M. Lehner, et al., “Re-examining the Khentkawes Town,” in H. and N. Strudwick (eds.), *Old Kingdom, New Perspectives. Egyptian Art and Archaeology 2750–2150 BC*, Oxford 2011, 150, fig. 7. © AERA, photo by M. Lehner, map prepared by R. Miracle (AERA GIS).

rectangular magazine-like structures. South of it, the court area leads to another set of mud-brick buildings that seem to combine some further storage facilities and possibly residential rooms.¹¹⁹ These installations break off toward the east, and the full extent is not known because they had completely weathered away by the 1930s.

Administrative function has also been assigned to the larger buildings K, L, and M. Felix Arnold explains that because this part of the settlement was separated by the causeway and the western enclosure wall from direct access to the funerary complex, this area is viewed as less residential and mainly administrative in nature.¹²⁰ It is linked via the underpass to the houses further north. The underpass is a strange feature and one can only wonder whether it had any aesthetic/religious reasons and/or served a practical purpose for its inhabitants.

The row of houses (A–J) stretching along the northern side of the causeway has been considered residential (Figure 5.25). They show a striking uniformity, with an orthogonal layout and almost identical internal plans. They have been interpreted as residential areas used by the priests who were responsible for the mortuary cult. Because the buildings are constructed in a row and each of them is sharing their eastern and western walls with adjacent buildings, the only way to identify a separate house or house unit is according to the internal arrangement of the rooms and the main entrances, which follow the same repetitive plan. On the one hand, these characteristics certainly indicate that much care and thought had gone into the organization and layout, most likely by a central authority that had planned the erection of the queen’s mortuary complex.¹²¹ On the other hand, it is



5.25. Plan of the Menkaura Valley Temple and the lower part of the Khentkawes town at Giza. After M. Lehner, et al., “Re-examining the Khentkawes Town,” in H. and N. Strudwick (eds.), *Old Kingdom, New Perspectives. Egyptian Art and Archaeology 2750–2150 BC*, Oxford 2011, 189, fig. 25. © AERA prepared by C. Mazzucato (AERA GIS), modified by M. Lehner.

possible to observe another interesting detail about actual settlement planning: the four buildings of the first phase do not seem to be radically different from the later ones. Caution remains here, however, as there are only a few pieces of mud-brick walls belonging to the earlier phase that have been preserved – for example, at building K, which has been associated with the more administrative/less residential part of the settlement (Figure 5.24).¹²²

Did the builders simply repeat one of the layouts that already existed and adapted it slightly to the smaller space

available next to the causeway? In addition, is it valid to deduce from the internal arrangement of rooms within building K alone that it was used in the same way as buildings A to H? Such considerations are important for interpreting these houses, but it is often too tempting to project modern preconceptions of state-planned housing onto this situation.¹²³ The actual planning is probably much less of an abstract concept as often assumed. It is inherent in ancient Egyptian culture to repeat patterns that are considered adequate and fulfilling the necessary needs.¹²⁴ Even

though the KKT is the largest Old Kingdom settlement known to have such a repetitive house layout, other sites were probably planned in a very similar fashion but remain much less visible in this regard because of size, modifications over time, and the general state of preservation when being excavated. It seems that a more-or-less generic layout was created by using examples from the domestic sphere, and this module was then repeated as needed. Such structures could then be used for multiple purposes, foremost residential but also as places where administrative activities could take place. Thus one should question the claim that official town planning in ancient Egypt involved some complex philosophy created by architects who were developing the “ideal” layout and organization for a specific settlement.¹²⁵

During the recent fieldwork, it has been possible to distinguish several phases of use of and alterations made to these buildings by paying close attention to the internal stratigraphy, such as floor and applied plaster layers as well as additions and restoration of the mud-brick walls.¹²⁶ Modifications have specifically been noted for the various access ways and doors, which would have had consequences for the use of the rooms, especially when doorways were blocked (Figures 6.3 and 6.4).

After a period of abandonment – which affected the whole area, including the MVT – the settlement was reoccupied during the Sixth Dynasty. The abandonment seems to be related to short-term, regional changes in the weather pattern, which caused several flash flood events, destroying parts of the settlement area notably in the interface zone between the southern KKT and the MVT complex. These flood events might be linked to a transitional period of change from moister to drier conditions and seem to have occurred very suddenly – but not only at the end of the Sixth Dynasty as often presumed, but rather sometime in the Fifth Dynasty.¹²⁷

However, this was not the end of the occupation of this settlement, and a phase of reoccupation dating from the late Fifth to the Sixth Dynasty is clearly distinguishable according to various rebuilds and alterations in the houses for which a different brick module was used. Smaller, sandy mud bricks of brown color characterize this phase of occupation and have been noticed in different parts of the settlement. Nevertheless, the reoccupation did not result in any major alteration of the buildings but is characterized mainly by repairs to damaged walls as well as the occasional minor addition. In the case of house E several round grain silos were constructed, which date to the final phase of occupation (Figure 6.4, phase c).¹²⁸

The archaeological evidence thus far has shed some light on the KKT settlement and its inhabitants. The layout of the various buildings falls into the category of residential character, especially those along the northern side of the causeway and certain installations of official character that are located on the upper terrace and separated from the rest of the buildings to the east (K–M). The location and physical link to the mortuary complex of Queen Khentkawes reveals undeniably the main purpose of this settlement – namely the upkeep of her funerary cult. The infrastructure provided at KKT is remarkable and has few parallels in the contemporary settlements. Even during the latest phase of occupation, the organization of the overall site was respected, and few additions were ever made, quite in contrast to examples that can be seen at the MVT (see details in the following section).

The residential part shows the presence of a closely linked community that most likely incorporated complete families, as the individual houses were of good size and show evidence for food production and storage. The so-called more official part to the south, with buildings K to M, has a significant proportion of rooms and installations that suggest a use for residential purposes too. It is important to consider that the division between official and residential was much less clear than it has often been assumed, and that many of these houses were probably also used for administration. It is very difficult from the preserved archaeological evidence alone to establish any further characteristics about their inhabitants.

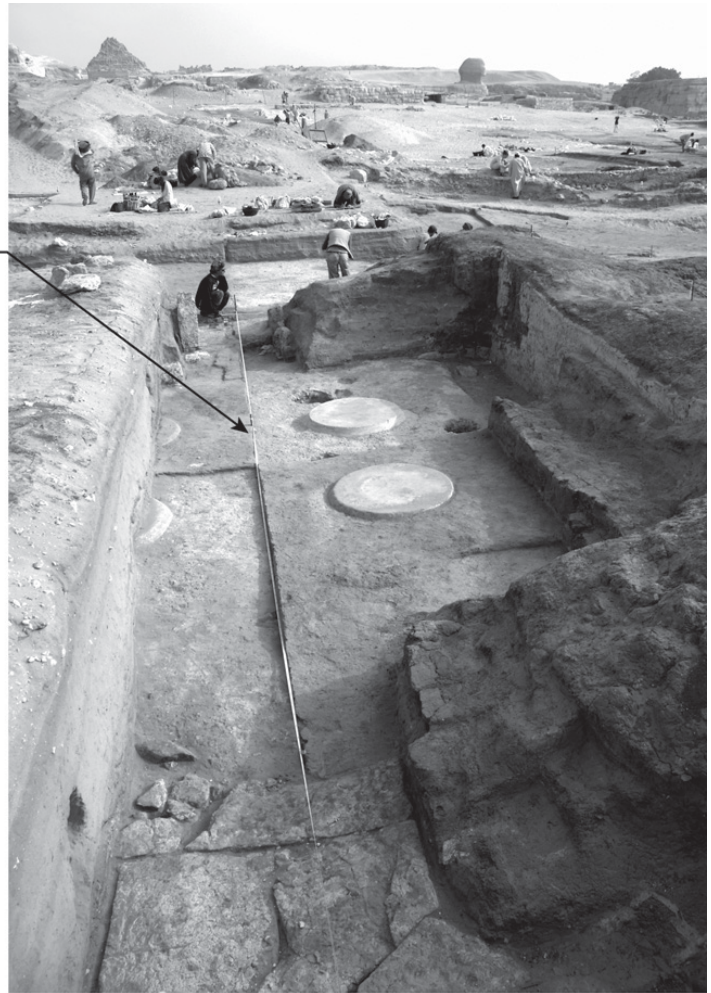
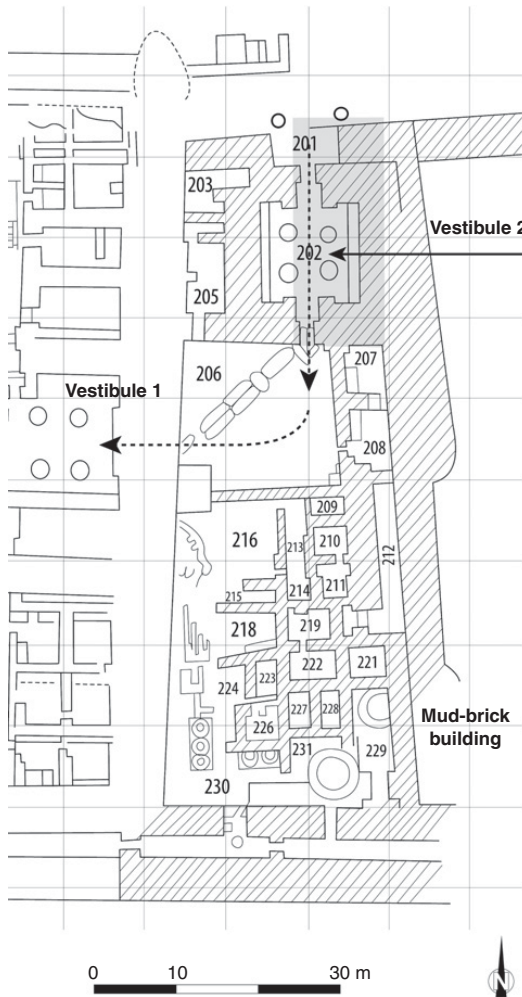
5.2.3.3 *The settlement at the Menkaura Valley Temple complex*

South of the Khentkawes settlement lies the Menkaura Valley Temple (MVT) complex (Figure 5.24). The pyramid and funerary temples of Menkaura of the Fourth Dynasty were finished by Menkaura's successor, Shepseskaf, which suggests that both KKT and MVT were occupied concurrently. Although initial preparations for the Valley temple had been made of stone and only the foundations seem to have been finished when Menkaura died, the remainder of the temple was completed in mud brick. Mud-brick buildings of various kinds were excavated in the temple's large courtyard, while in front of its monumental entrance further evidence for settlement was excavated – at the so-called ante-town. Thus, the mud-brick buildings were confined to the temple court proper and constituted part of a larger settlement (Figure 5.25).

When George A. Reisner excavated the site of Menkaura's Valley temple, he found two temple constructions, one of which constitutes a Sixth Dynasty reconstruction of the older late Fourth Dynasty temple. He also noticed several phases of settlement in and around the temple and published a composite map in which all the periods are shown together on the same plan but can be distinguished from each other by color coding.¹²⁹ The MVT complex is characterized by long-term use and occupation of the first Valley temple, which can be divided into two distinct phases of occupation separated by two periods of destruction and abandonment. After the initial construction work for the temple had started under Menkaura – marked by the use of monumental stone blocks and the preparation of large stone foundations – the temple was finished in mud brick, probably due to the early death of Menkaura and his son Shepseskaf taking over the building work. Already at this early phase, traces of habitation in the form of mud-brick buildings appear inside the large open courtyard and along the eastern exterior of the temple, clearly related to the personnel taking up the funerary cult. Only a few mud-brick walls have been recorded, and it is not possible to get a better picture of the layout and organization of houses of that time.

The temple cult did not continue for long, as can be witnessed by signs of neglect, looting, and destruction that Reisner recorded in the form of layers of broken-up statue pieces and debris covering the courtyard underneath the second phase of occupation. This first phase of abandonment predates the best-preserved phase of settlement inside the temple court and must have happened sometime during the early Fifth Dynasty, probably at the time when the kings focused their building activities at Abusir instead of Giza.¹³⁰ The rebuilding and restoration of the temple and its surrounding area occurred sometime during the mid- to late Fifth Dynasty, likely under Niuserre, who is the first ruler to be attested in clay sealings at Menkaura's pyramid temple (also frequently called Upper Temple), which is a sign that the cult activity was taken up again. This phase of occupation is the one that is best preserved at the Valley temple. The settlement evidence at the MVT comes from two areas: first, the temple courtyard itself fronting the temple proper on its east side and, second, a concentration of buildings on the outside of the temple that has been termed the “ante-town” (see Figure 5.26). During the reinvestigation of the ante-town area, evidence was found for the entire eastern temple enclosure wall having

been rebuilt as well as a restoration and an addition undertaken to the two vestibules leading into the temple courtyard proper (Figure 5.26).¹³¹ Lehner noticed the close resemblance of Vestibules 1 and 2 in architectural details such as the column bases and concluded that they belonged to the same phase of construction.¹³² In a way, the ante-town can be seen as an enlargement of the pyramid temple complex itself, and the two vestibules, while providing a dramatic entrance setting, also certainly served as a measure for closely controlling access to and from the temple complex. In addition to some mud-brick buildings of possibly residential character along the southern half of the ante-town, the courtyard fronting the inner sanctuary was also covered by brick installations (Figure 5.26). None of the mud-brick buildings resembles any preplanned layout comparable to that of the KKT settlement. Even though the southern part of the court was occupied by mud-brick buildings laid out in an orthogonal plan parallel to the surrounding temple walls, one can see a jumble of interconnected rooms that are difficult to divide into properly separated “residences” (Figure 5.26). The northern half of the court was occupied by silos and storage magazines, also built of mud brick. Kemp characterized this phenomenon as the “villagization of a monument,” due to the priests and related staff occupying most of the actual temple and leaving only the actual cult installations accessible.¹³³ One can only speculate as to whose initiative prompted the construction of these buildings: Was it priests and staff who decided that they needed accommodation right at the temple itself, or did the royal architects who were responsible for the reconstruction and renewal of the MVT decide to add the installations in order to ensure the upkeep of the mortuary cult? From the initial layout and organization of residential units along the southern side of the courtyard and storage installations to the north, it seems possible that there was provision made by the official authorities for the community of priests and administrators to be accommodated. These houses certainly continued to be changed and adapted to the needs of the inhabitants in the course of their occupation. Over time, the whole Valley temple complex started to decline and fall into neglect when the episode of flash floods severely damaged the temple. Water cut through the back of the temple and destroyed most of it, leading to the temple's abandonment.¹³⁴ This seems to be the same event of floods that also led to the destruction and abandonment of KKT and is likely to have occurred sometime during the Fifth Dynasty.¹³⁵

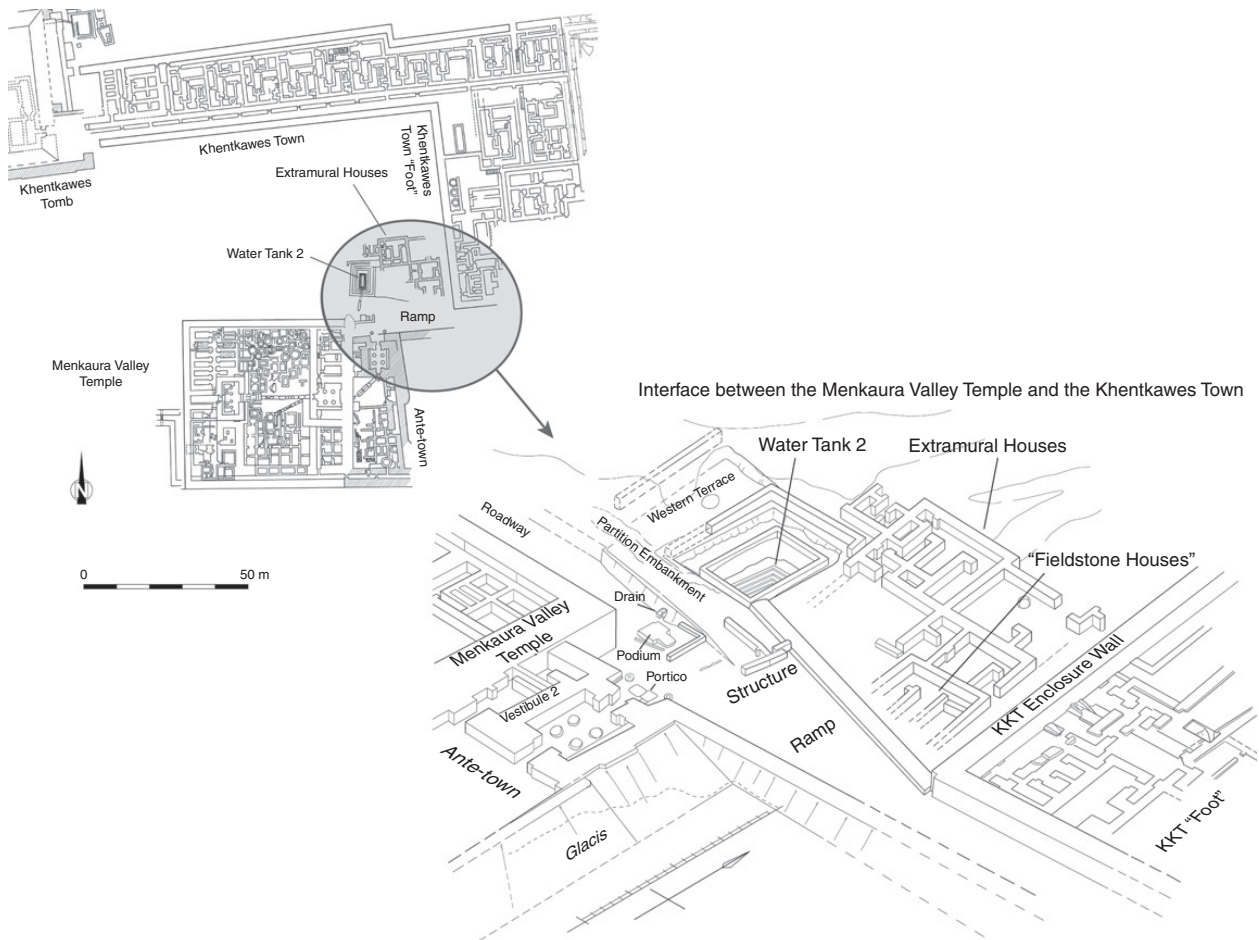


5.26. Plan of the ante-town of the Menkaura Valley Temple at Giza and view of the second vestibule during the excavations by AERA. After M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project: Season 2008. Preliminary Report*, GOP 4, 2009, 26, figs. 19a, b. © AERA, photo by M. Lehner, map prepared by C. Mazzucato (AERA GIS).

After this period of abandonment, and probably during the Sixth Dynasty, a second temple was built over the ruins of the first one, and the whole temple precinct – including its settlement – saw a time of revival before it was finally abandoned at the end of the Old Kingdom.¹³⁶

Kemp's characterization of the settlement at MVT as a fortified village kept alive by the provisions made for the mortuary cult of Menkaura, a king long dead by the time the occupation in the temple court and the ante-town was at its height, is a valid interpretation. However, when considered within the wider region, there seems to be increasing evidence for the existence of an urban zone that was densely settled by numerous agglomerations serving different mortuary installations and purposes.

Additional settlement remains were recently discovered during the excavations of the interface between the MVT and KKT, an area that had never been investigated in depth before, either by Reisner or by Hassan.¹³⁷ This area revealed the existence of a terraced landscape with an ascending ramp on a monumental scale reaching 12 m in width near the entrance to Vestibule 2 of the Menkaura complex (Figure 5.27). The ramp led from the east up to the western plateau, passing the two mortuary complexes and providing direct access on the southern side to the vestibule (2) of the MVT ante-town. It was flanked on each side by a mud-brick wall and moved west in the form of a roadway, past a mud-brick podium on one side while ascending on the other along an embankment just next to a large water tank. In the space between the water



5.27. Interface area between the Menkaura Valley Temple and the Khentkawes town. After M. Lehner, “Ascending Giza on a Monumental Ramp,” *AERAGRAM* 11.1 (2010), 9–10. © AERA, map prepared by C. Mazzucato (AERA GIS), isometric drawing by M. Lehner.

tank and the KKT enclosure, excavators discovered several extramural houses (Figure 5.27). Lehner and his team interpret the ramp as the primary access way to the Giza necropolis, foremost for hauling up large quantities on nonlocal stones used in the construction of the royal pyramid complexes. After the completion of the royal mortuary complexes, the ramp was transformed into a major access route to the necropolis.¹³⁸ This interpretation indicates that the communities inhabiting the interface area had a role as gatekeepers. It is possible that the podium, located at a central point where the ramp reaches its maximum width close to the water tank, served ritual purposes, and it would have secured a large amount of water for the inhabitants as well (Figure 5.27).¹³⁹

While the settlements of KKT and MVT, including the interface, are good evidence for larger communities

being settled in the Giza necropolis, there is also much evidence for the continuation of the settlement toward east, where it disappears under a modern cemetery. As mentioned previously, the KKT does not stop at the end of the causeway where the large basin has been located; new evidence has come to light for further settlement east of the basin (see Figure 5.23). Similarly, Hassan made some test trenches within the boundary of the Muslim cemetery and found that mud-brick buildings continued eastward from the foot of KKT (Figure 5.10).¹⁴⁰

5.2.4 The Old Kingdom pyramid towns

The analysis of the various forms of settlement that occurred at the royal mortuary complexes in the Memphite region shows the existence of three distinct types of agglomerations: priests’ accommodations at the

pyramid temple precincts, numerous short-lived production and industrial settlements within the desert and along the desert edge near important building sites, and long-term settlements at the Valley temples. These fulfilled very specific functions and fall into the category of specialized settlements. An additional point for discussion in this context that needs to be addressed is the frequent mention of a certain type of settlement called “pyramid town” linked to the royal mortuary complexes. The ancient Egyptian word for town, *nwt*, written with the determinative of “pyramid” and conventionally translated as “pyramid town,” has been noted in several royal decrees of the Old Kingdom.¹⁴¹

The debate about the exact definition of “pyramid town” and what kind of settlement was designated by this term is still ongoing, and so far without any fully satisfying conclusions.¹⁴² The generally accepted view is that pyramid towns are settlements that are “usually situated in the immediate proximity of the pyramid or valley temple and [are] surrounded by an enclosure wall. Houses and service facilities were erected to a uniform plan, the size of houses reflecting the position of their owner. Such settlements were often the starting point from which a town later developed.”¹⁴³

However, there are some serious problems with this definition, which not only encompasses any settlement associated with royal mortuary temples but also sees the orthogonal, planned layout as a prerogative. There is also no evidence at any of the sites outlined in the preceding discussion for later settlement that further developed organically into larger towns.

The term “pyramid town” is an ancient Egyptian category which has been noted in several royal decrees dating to the Sixth Dynasty that were found near Valley temples in the Memphite region. The decrees list exemptions to be made for such towns and provide a glimpse of offices held by the inhabitants;¹⁴⁴ therefore, they have been used as major source material for defining pyramid towns and identifying their inhabitants.¹⁴⁵ Based on the textual evidence, a pyramid town is a settlement linked to the royal mortuary complex and included a wide spectrum of inhabitants in terms of occupation (priests, administrators, artisans, etc.) in addition to a complex hierarchy of officials and priests of which the highest-ranking people in charge are directly addressed at the beginning of the decrees.¹⁴⁶ Furthermore, that this type of settlement had a long-term occupational history can be deduced from its foundations under Fourth Dynasty rulers (e.g., Snofru and Menkaura), whereas the decrees

were issued toward the mid- to late Sixth Dynasty. In addition, the decrees deal with the various endowments and exemptions that were granted for the upkeep of a deceased king’s funerary cult.

The composition of the inhabitants, the different types of exemptions granted, and the fact that these were permanent settlements of long duration clearly exclude the identification of workers’ settlements or production/construction sites as pyramid towns. Even though this seems an obvious conclusion, the possibility of workers’ settlements being pyramid towns or having evolved into pyramid towns has been evoked several times.¹⁴⁷ This cannot be correct, especially in view of the much more temporary character of such workers’ installations and productions sites in the vicinity of the pyramids – such as the installations near the Menkaura pyramid described previously. Even the gallery complex at Heit el-Ghurab did not seem to have functioned for more than parts of the Fourth Dynasty and possibly until the early Fifth Dynasty at the latest.

Thus the two possibilities that need to be considered are the habitation sites within the precincts of the pyramid temples and those larger settlements that seem to have developed in and around the Valley temples. Helpful in this respect is the actual placement of the decrees, which needs to be taken into account. Both the Dahshur decree by Pepi I and the one from the Menkaura Valley Temple issued by Pepi II were found at the Valley temples.¹⁴⁸ It seems that royal decrees of that kind were never put up far from the actual location they are referring to – which is, for example, clearly seen for the decree of Pepi II granting the governors of the Dakhla Oasis residing at Balat/Ayn Asil the right to erect *ka*-chapels for their own cults. This latter decree was in fact found in front of one of such *ka*-chapels at the palace complex at Balat (see [Section 5.5.1](#)).¹⁴⁹ Similarly, the fragments of a decree of Shepseskaf dealing with offerings for the cult of Menkaura at his pyramid were discovered in several pieces at the pyramid temple, where the decree presumably was erected at the main entrance.¹⁵⁰ Taking all this evidence into consideration, it is possible to conclude that the decrees that explicitly mention pyramid towns were found exclusively at the Valley temples and might therefore be referring to the settlements within the Valley temple precinct and its vicinity. From these decrees it is also clear that a relatively large group of inhabitants was being designated as belonging to a pyramid town, which makes the identification of the few mud-brick houses within the pyramid temple precinct an unlikely solution.

The proximity of the Valley temples to the floodplain certainly added to a more favorable condition for long-term settlement, including the presence of a larger and more diverse population. Some of the inhabitants were also engaged in agricultural activities.¹⁵¹ Another element that was part of a pyramid town is the royal cult temple, and this structure is named clearly in the Dahshur decree, which is the most detailed of all the decrees mentioning pyramid towns.¹⁵² Little else can be learned from the decrees in terms of organization and layout of such towns, and there is no information as to size of settlement and its architecture.¹⁵³

As can be seen from the archaeological evidence presented here for settlements located at Valley temples in the Memphite region – especially the Khentkawes town and Menkaura Valley Temple complex – they are plausible candidates for “pyramid towns.” In addition, a recent drill-core survey near the Valley temple of the Red Pyramid at Dahshur has provided evidence for the presence of a large Old Kingdom settlement in its vicinity (Figure 5.8), but it is covered by several meters of sand and alluvium and currently remains inaccessible for any further exploration.¹⁵⁴ The royal decree issued by Pepi I was found at the turn of the past century attached to the southeastern angle, probably next to the main gate, of a monumental limestone enclosure wall that can be identified as part of Snofru’s Valley temple complex.¹⁵⁵ Kemp also identifies the Menkaura Valley Temple settlement as the pyramid town mentioned in the late Sixth Dynasty decree and characterizes this last stage of occupation as a monument transformed into a village.¹⁵⁶ The mud-brick buildings had by this time completely encroached upon the temple building proper, leaving only the cult buildings intact. It seems certainly a viable argument to identify the settlement within the courtyard of the temple complex and on its outside, the ante-town, as the pyramid town of Menkaura (Figure 5.25).

From the example of the well-known Middle Kingdom pyramid town of Lahun, the notion that a pyramid town had to be preplanned and show an orthogonal layout with repetitive house units organized according to a clear hierarchy was previously developed by several authors and used for the definition of “pyramid town.”¹⁵⁷ This cannot be correct for the Old Kingdom pyramid towns, among which only the Khentkawes town fulfills the definition. Rainer Stadelmann suggests as a solution that the decree from the Menkaura Valley Temple was in fact referring to the Khentkawes settlement, which he then identifies as the pyramid town of

Menkaura.¹⁵⁸ However, the recent work by Lehner’s team investigating a possible link between these two sites has provided good evidence that this is not possible.¹⁵⁹ The archaeological evidence in the interface area between the Khentkawes town and the Menkaura Valley Temple complex is not providing any direct link and access way from one to the other. They both flank a large ramp system that was one of the major access ways into the Giza necropolis. Another observation also suggesting two separated zones that were not built according to a uniform plan is the marked difference in orientation between the settlement sites (see Figure 5.25). Nevertheless, the two sites cover an area much larger than previously thought, and the eastern limits have not yet been attained and probably never will be because of the large modern cemetery in this area.

In terms of longevity, it is now clear that both sites were occupied on a long-term basis, from the end of the Fourth/early Fifth Dynasty until the end of the Old Kingdom, which encompasses a period of about 250 to 300 years. In addition, the major sequences of settlement and reoccupation seem to occur roughly simultaneously. By using the newly recovered data from Khentkawes town of the different phases of occupation and abandonment, this sequence can now also be linked quite well to the sequences that were established for the Menkaura Valley Temple by Reisner.¹⁶⁰ This would also fit well to identifying these settlements respectively as pyramid towns.

Therefore, it is possible to conclude, as far as current research stands, that the settlements in and around the Valley temples are those examples that can be identified as the actual pyramid towns corresponding to the ancient Egyptian term.

5.2.5 Concluding remarks about settlements linked to the royal mortuary complexes

The pyramid and Valley temples of a royal mortuary complex were, in their majority, stone-built constructions. Only when a king died prematurely was mud brick used as a substitute in order to finish the building work. This can be clearly witnessed at the Menkaura pyramid complex at Giza and the Raneferef pyramid at Abusir. However, many additional architectural elements such as enclosure walls, storage, and work areas were principally built in mud brick, which does not necessarily mean that they are intrusive. It is important to disregard the modern preconception of the strong contrast between carefully constructed stone buildings and much more informal-

looking, often eroded and less-appealing remains of mud-brick walls as evidence for poor substitutes or “low-grade material.”¹⁶¹ It is evident that the ancient Egyptians adhered to a precise concept about what stone was used for and what should be made of bricks. Any building that had a nonreligious function was made of mud brick, which includes palaces, administrative buildings, magazines, production areas, elite houses, and domestic buildings, among other structures. The use of fieldstone as a building material is usually restricted to environments where this was the most easily obtainable material – for example, in desert zones – as can be witnessed at the production site south of the Menkaura complex.¹⁶²

In order to establish whether any of the above-mentioned mud-brick buildings within a mortuary or Valley temple complex are intrusive, only the stratigraphic evidence can provide a clear answer. As the archaeological evidence shows, there are examples for both. At the recent excavations of the pyramid temple of Radjedef at Abu Rawash, there is evidence that the constructions made of mud brick were part of the original layout of the complex.¹⁶³ From the stratigraphy it is obvious that they are all part of the same building project and were part of a larger plan, which was developed and expanded as the pyramid itself evolved. There is no evidence for these installations being secondary additions made as a local initiative, despite the long-term occupation of the site until the end of the Old Kingdom. None of the settlement remains provided any evidence for an expansion beyond the enclosure wall limits over time either. Similar evidence was found in Abusir at the Neferirkara complex.¹⁶⁴ The mud-brick constructions were situated in the space between the stone temple and the mud-brick enclosure, which is a common phenomenon for most of these installations. The enclosure wall was never intended to include a large empty area, but rather to surround the entire temple complex, including the components that were made of mud brick. This is also valid for the Valley temple of Snofru and the pyramid temple for Queen Udjebten at Saqqara, to name the better-preserved examples.¹⁶⁵ However, these structures often saw a long-term use into the Sixth Dynasty and therefore signs of alterations can be found too. In some examples, such as that of the Neferirkara complex, the inner courtyard of the temple saw additions in mud brick around the colonnade supporting the roof, which in the case of the Neferirkara site was apparently also used for shelter, as can be witnessed by traces of fireplaces.¹⁶⁶ At Abu Rawash, a new construction in the initial

courtyard of the temple was added in the northeastern corner.¹⁶⁷ The pyramid temple of Raneferef at Abusir is a slightly different example, in which mud-brick houses were only built later, when an extension of the whole complex was constructed to the east in the form of a colonnaded courtyard.¹⁶⁸ According to the results from the excavation, the evidence for settlement only appeared later in this area and constituted an addition that probably does not date earlier than the reign of Djedkare-Isesi, who was the third ruler after Raneferef.¹⁶⁹

Both at the Khentkawes complex and the Menkaura Valley Temple, mud-brick buildings were also part of the original layout. Whereas the long evolution of the Menkaura Valley Temple shows an increase in various kinds of buildings at the temple itself, leaving only the central shrine open for the cult activities by the end of its occupation, it is evident that this situation mainly characterizes the last stage of the site’s development.¹⁷⁰ The presence of mud-brick buildings belonging to the original plan also can be clearly recognized at the Khentkawes town at Giza, where not only the residential areas were added along the causeway in a preplanned fashion – one of the earliest examples for town planning – but also the magazine complex for the chapel of the mastaba was part of the plan being integrated in the same row that accommodated the residential units. The mortuary foundation established for Queen Khentkawes took a sizeable group of support staff (priests and administrators) into consideration right from the beginning.

Thus, these examples provide good evidence for mud-brick buildings of various functions being part of the original concept for these mortuary installations. There seems to be a tendency of development from likely semi-permanent occupation into more permanent settlement, but the published archaeological evidence is not always precise enough to allow for such conclusions. The installations that were part of the pyramid temples usually remained small and rarely expanded.

It is justified to speak about small groups of houses and storage areas that were in part for domestic use, but it is not possible to exclude administrative activity, especially because textual sources do provide information of the arrival of deliveries to the pyramid temples from the domains as well as from the sun temples in the case of Abusir.¹⁷¹ Discarded clay sealings found at several pyramid temples also confirm this. Evidence for larger workshops and other production areas is absent from the archaeological record for both pyramid and Valley temples. This must be a reflection of the delivery of goods and

food that arrived in an already finished and prepared form – such as bread loaves, beer rations, and funerary pottery.

5.2.6 Urban society in the Memphite region

The foregoing analysis of the various forms of settlement that can be encountered in the Memphite region and that are all, without exception, linked to the large royal mortuary complexes indicates the presence of a relatively complex settlement system that effected a substantial population during the Old Kingdom. These sites are good evidence for the emphasis of the central government in concentrating many resources in this part of the country, while the provinces were integrated through the establishment of a large number of royal domains, with little evidence for major urban centers there during the first half of the Old Kingdom. None of the three categories of settlements outlined at the beginning of this chapter can be considered urban as such, but they do not fall into the category of rural settlements either. However, the archaeological evidence shows that they were conceived and inhabited by an urban society. The three settlement types occurring in association with royal mortuary complexes were founded and maintained to a large extent by the state, which also took much care to control the number of inhabitants. The presence of enclosure walls can be witnessed in all of the cases outlined previously. The so-called priests' accommodations were usually confined within the interior of the pyramid temple enclosure, and there is no evidence that they ever spread beyond these walls. At Heit el-Ghurab, numerous enclosure walls have been noted, especially around the Gallery Complex and the Royal Administrative Building, which served to control access to and from these installations.¹⁷² Less evidence is available for the Eastern and Western Town, but this might be more a reflection of the current stage of the excavations or the general preservation of mud-brick walls, which have been subjected to frequent robbing of stone and mud bricks.¹⁷³ The large stone enclosure only partially preserved at the settlement and production site south of the Menkaura pyramid is another example of a large wall that enclosed settlement structures. Similarly, the Khentkawes town was laid out within the limits of an enclosure wall, and, despite a long period of occupation into the Sixth Dynasty, these limits were kept. The Menkaura Valley Temple settlement remained concentrated mainly within the temple walls, but the ante-town was enclosed by a substantial

mud-brick wall too (Figure 5.25). In most cases, these enclosure walls had a double function as temple enclosures and to define the limits of the settlement. In this capacity, they restricted and controlled access to and from those sites – an important aspect that is also revealed in the royal decrees, which confirm that the number of inhabitants for each site was limited by the central government. It has to be kept in mind that a certain portion of the inhabitants of all these three types of settlements were only present on a temporary basis and must have had further accommodation and property elsewhere – though exactly where is not known. It is also not clear whether some of the much longer-occupied pyramid towns saw a gradual shift from temporary residents to permanent inhabitants, which is possible to infer from the later installation of private storage facilities noted in several cases. The complete economic dependency of these communities on the state can be deduced from the fact that none of the settlements survived the economic and political decline that characterizes the end of the Old Kingdom.

From the royal decrees it is also evident that the inhabitants included a wide spectrum of people belonging to different social groups, including high officials and priests, some whom were closely linked to the royal palace, such as the category of officials called *Khentishe*.¹⁷⁴ However, this hierarchy is less visible from the architectural remains and layout of buildings at these sites.

One exception to this is the variety of building types and sizes that can be seen at the settlement of Heit el-Ghurab at Giza, which is characterized by numerous installations and buildings that evidently formed three different kinds of neighborhoods (the Gallery Complex and related production, storage, and administrative facilities; the Western and Eastern Town). The Heit el-Ghurab settlement demonstrates the full complexity of a town that is hard to fit into any precise classification or type. The various elements consist of the state-founded and controlled Gallery Complex and related production facilities, the sizeable elite settlement at the Western Town, and the more village-like character of the Eastern Town. The area currently exposed encompasses about 5.25 ha, and it has been noted that the settlement continues eastward under the modern town of Nazlet es-Samman (Figure 5.10).¹⁷⁵ Nevertheless, it is not easy to fit this town into a distinctive category, so its role as well as the nature of its foundation places it within the general category of “state-founded settlements with urban character.”¹⁷⁶ There is ample evidence for much social stratification and different “quarters” within the

overall organization of this settlement, with its storage facilities and production sites. Some typical urban features are missing, though, such as a town enclosure wall, which would have surrounded the entire settlement. As mentioned previously, the presence of enclosure at this site is attested but seems to be limited to certain areas such as the Gallery Complex and the Royal Administrative Building. Also currently missing is any trace of a temple dedicated to a local town god, which would have been the religious focus of the community. No evidence for a shrine, chapel, or small temple has been found so far. The strong control by the central government is omnipresent, and the settlement's relatively short lifetime – encompassing the reign of Khafra and Menkaura – has led some scholars to cast doubt on its urban characteristics.¹⁷⁷ As Ana Tavares pointed out in her general analysis of this site, the time span Heit el-Ghurab was occupied totals around 40–50 years, which is, however, much longer than Tell el-Amarna, the short-lived royal city of the New Kingdom, demonstrating that duration is not a useful argument for urban or nonurban.¹⁷⁸ The decline and abandonment of Heit el-Ghurab seems to be related to the halt of royal building works at Giza, and it might also be connected to the rise of Abusir as royal cemetery.

Another important point of discussion is whether the mud-brick settlements encountered in relation to the royal mortuary temples were mainly later additions linked to the foundation of the Valley or pyramid temples or whether they were part of the original foundation of the respective temple complex. Did the people who were involved in the upkeep of the funerary cult construct on their own initiative the accommodations and facilities they considered to be convenient for carrying out the necessary tasks, or were such installations already an integral part of a royal mortuary foundation? While there is evidence for both scenarios within the long-term evolution of these sites, it is necessary to point out that there is much evidence for such mud-brick structures being part of the initial construction and layout of the pyramid and Valley temples.¹⁷⁹

The archaeological evidence for a variety of settlement sites situated along the Western Desert edge in the region stretching from Meidum in the south to Abu Rawash in the north provides an important insight into the economic and social importance of these royal funerary monuments and the various kinds of settlements that can be encountered there. These sites are typical for the Old Kingdom and show a strong influence of the centralized state on the settlement of a sizeable portion of the

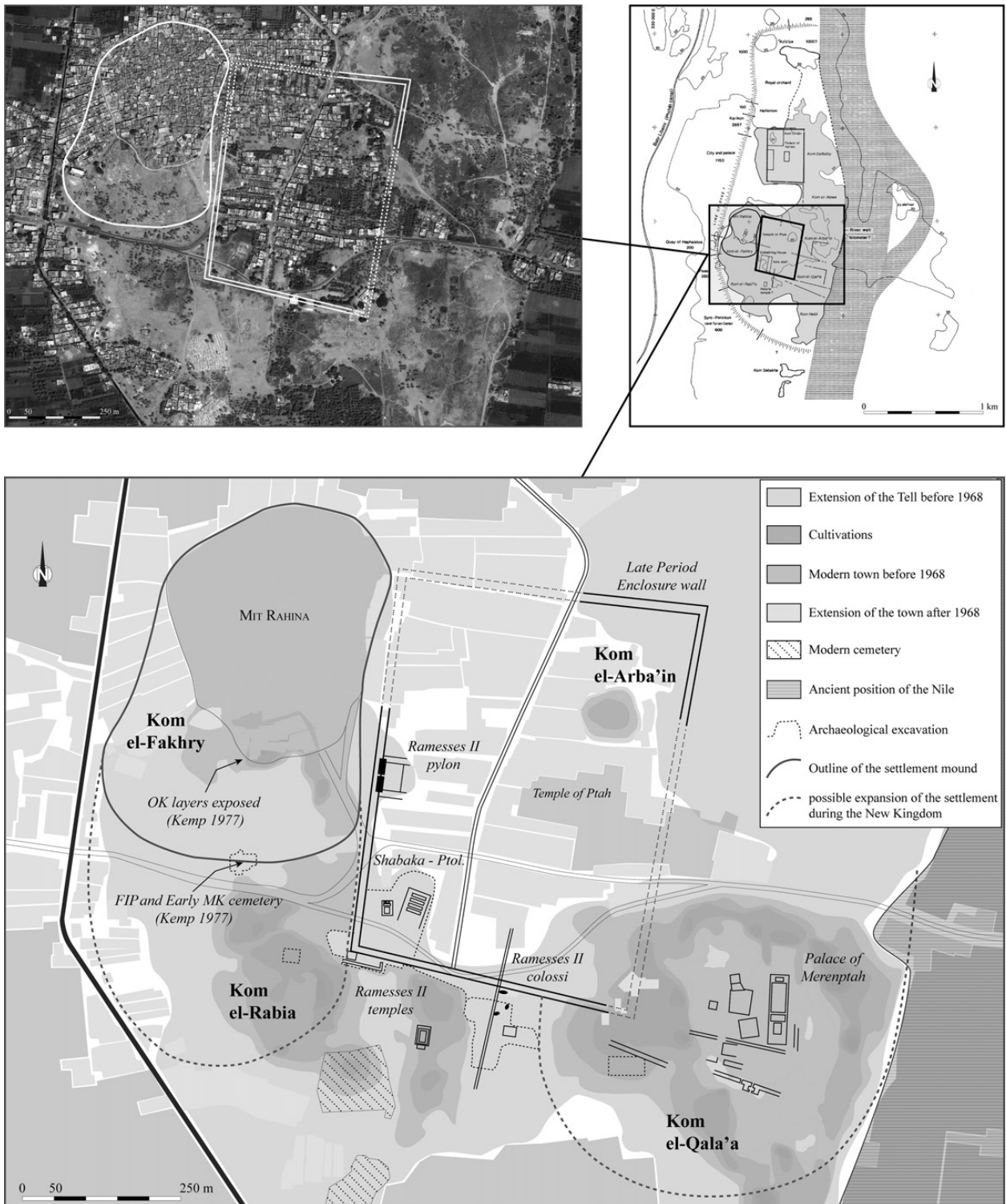
overall population, which was concentrated here. It does not come as a surprise, then, that it is at these sites that first evidence for town planning can be encountered and that it evolves into an important tool of the central government during the Middle Kingdom.

5.3 DISCUSSION OF MEMPHIS VERSUS A “CAPITAL ZONE”: THE EVIDENCE FOR A “SHIFTING CAPITAL” DURING THE OLD KINGDOM

From the Early Dynastic Period onward, the importance of the Memphite region for the newly founded Egyptian state can be clearly witnessed from textual and archaeological sources. The seat of the central government was situated in this region, typically equated with the city of ancient Memphis, which lies to the east of the necropolis at Saqqara within the floodplain (Figure 5.2). However, archaeological evidence for the ancient Egyptian capital at Memphis during the Old Kingdom is almost nonexistent, even though the importance of the site can be inferred from textual sources. The major question to ask is whether Memphis would indeed have formed the largest urban center within Egypt from the Early Dynastic Period onward and whether the lack of archaeological evidence supporting this is mainly a reflection of the bad preservation of the archaeological remains or whether Memphis contained the royal palace and the Temple of Ptah during the third millennium BCE, which is attested by the texts, but never developed into a vast urban city.

The ancient settlement mounds – or “the ruin field,” as some authors have called it – of Memphis is located near the modern village of Mit Rahina and has seen much destruction by human activity (sebbakhin, agriculture, expanding modern habitation) and natural erosion, leaving only glimpses of a once-prominent ancient Egyptian city for which there is ample evidence dating to the later periods of Pharaonic history.¹⁸⁰ The current state of the site, which is partly buried under several modern Egyptian villages as well as layers of alluvium covering the oldest settlement remains, makes any estimate as to its total size impossible (Figure 5.28). Another factor that needs to be considered is the gradual eastward movement of the river, which has certainly led to the complete destruction of some earlier settlements in this area, especially the remains dating to the third millennium BCE. David Jeffreys and Ana Tavares have proposed a model for Early Dynastic Memphis up to modern times that shows the initial course of the river much more to the

5.3 DISCUSSION OF MEMPHIS VERSUS A “CAPITAL ZONE”



5.28. Satellite view and plan of the southern part of Memphis (Mit Rahina). By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after B. J. Kemp, “The Early Development of Towns in Egypt,” *Antiquity* 51 (1977), 195, fig. 7; and D. J. Thompson, *Memphis under the Ptolemies*, Princeton, 1988, 14 fig. 3.

west, close to the escarpment of the desert at Saqqara, while the corresponding settlement lay east of the river.¹⁸¹ The gradual shift in the overall settlement pattern over millennia has certainly played an important role in the formation and long-term evolution of the site.¹⁸² Without extensive excavations and drill cores, shifts in settlement centers and overall developments are almost impossible to discern in the archaeological record.¹⁸³

The current site of Memphis consists of various tell formations forming relatively small mounds. Evidence for an Old Kingdom occupation occurs up to now mainly in the form of scattered pottery (Figure 5.28). Excavations in 1954 at Kôm Fakhry, the westernmost mound that is partly covered by the modern village of Mit Rahina today, revealed the presence of a large multichambered First Intermediate Period tomb along its southern limit.¹⁸⁴ Exposed stratigraphy along the southern side of Kôm Fakhry shows layers of New Kingdom settlement remains along the upper part of the sections, but numerous Old Kingdom sherds were found in secondary deposits and pits along the lower ground level where parts of the mounds have been destroyed by sebak digging.¹⁸⁵ Barry Kemp, who spent some time at the site conducting a survey in the late 1970s, suggests that the pre-New Kingdom levels should be relatively intact underneath the later settlement remains and are probably still lying above the current water level.¹⁸⁶ Together with the First Intermediate Period tomb situated along the margins of the settlement, this could be a good indication for the presence of an early town at Kôm Fakhry. Recent fieldwork conducted at this site has led to the discovery of settlement remains dating to the late Middle Kingdom.¹⁸⁷

More recent debates on the difficulties in identifying the precise location of the Early Dynastic and Old Kingdom town of Memphis and the absence of any detailed archaeological data for this period have led to the suggestion of Memphis in the Old Kingdom being a “narrow, yet extensive settlement extending the entire 30 km length of the Memphite necropolis.”¹⁸⁸ This hypothesis is based on the apparent lack of Old Kingdom settlement remains at Mit Rahina, the long-term development of the Old Kingdom cemeteries stretching from Meidum and Dahshur in the south to Abu Rawash in the north, and on the sporadic presence of settlement remains along the desert edge of these sites, which have been discovered during archaeological fieldwork. However, what has not been taken into account is

the existence of a large network of settlements being closely connected to the established funerary cults of Old Kingdom rulers and the related temples. These settlements cover large areas in which different settlements fuse together, forming a relatively densely settled landscape along the Western Desert escarpment. The area chosen as royal burial ground was established during the second half of the Early Dynastic Period at Saqqara, where it remained during the Third Dynasty. Then, in the early Fourth Dynasty under the reign of Snofru, it moved south to Meidum and Dahshur, while from the reign of Khufu onward it concentrated at Giza and Abu Rawash in the north (Figure 5.2). The Fifth Dynasty rulers moved back south to Abusir, though by the Sixth Dynasty the main focus lay again at Saqqara.

The best-explored zone of desert settlements is currently located at Giza, where archaeological fieldwork has revealed the presence of a variety of settlement sites interspersed within the Giza necropolis (Figure 5.2). While most of these were occupied mainly during the Fourth Dynasty, the heyday of the Giza necropolis, there are examples of settlements that were directly linked to royal funerary complexes that continued to be inhabited until the end of the Old Kingdom. Thus, a certain number of specialized communities had a long tradition of settling at the pyramid and Valley temples, which were supported by the agricultural domains that had been established for these royal funerary cults – a system that continued to function until the end of the Old Kingdom. Larger settlements that were primarily linked to the construction work of the royal funerary complexes, in contrast, were abandoned as soon as the royal cemetery moved elsewhere. At Heit el-Ghurab this was the case, even though the settlement had all the possibilities of evolving into a major town in the long term. It was located along the desert edge in the vicinity of the floodplain close to fertile agricultural land, and it was part of a complex infrastructure with possible access to the river through a canal.¹⁸⁹ Nevertheless, it does not seem to have survived much longer than the end of the Fourth Dynasty, and it was the Eastern Town, which can be considered the least state-planned neighborhood, that survived longest – possibly into the Fifth Dynasty.¹⁹⁰

There is some evidence for the situation at Giza being mirrored at Dahshur and Abusir concerning settlements in the desert zone linked to the mortuary temple complexes for the earlier part of the Fourth Dynasty and the Fifth Dynasty, respectively, although no settlement has

been discovered along the desert edge that would compare with Heit el-Ghurab.¹⁹¹ Although quite incomplete, the evidence has led to the hypothesis of a shifting capital zone in the Memphite region according to the changing location of the royal cemetery, which remains a strong possibility but needs to be confirmed by more archaeological data. It would make much sense to see increased settlement in areas where much focus was directed by the state, going beyond the mere construction of funerary monuments and including their integration into a complex economic network controlled by the central government.¹⁹² The maintenance of the royal cults clearly attracted people and favored craft specialization and food production facilities, which were needed for the daily offerings. The supply of those was guaranteed through a network of rural estates and domains. It is of course equally plausible that Giza was more or less an exception in its urban development, and this might have been linked to the larger distance between Giza and Memphis, whereas Saqqara, Abusir, and Dahshur are much closer to the latter.

In contrast, the presence of larger settlements near the Western Desert escarpment does not necessarily exclude the existence of the actual capital with the royal residence located at the site of Memphis. The sprawl of settlements along the desert edge belongs to the category of state foundations, and they were very dependent for their existence on the state, from which their inhabitants received most of their income. These agglomerations did not survive the economic and political decline that characterized the end of the third millennium BCE and were abandoned by the early First Intermediate Period, although there is some evidence for the construction of royal burials on a less monumental scale during this time at Saqqara, which is closest to ancient Memphis. This demonstrates that Memphis' existence as the principal seat of the rulers certainly continued for a while after the reign of Pepi II – a fact that would support the existence of a major early urban center at Memphis that saw a long-term evolution as the most prominent settlement of the country, which formed a large tell over time that was occupied until the end of the Pharaonic period. Its occupational history is likely to have resembled large settlement sites such as Buto in the Delta, which like a living organism saw periods of growth and decline and shifts within a limited area over the millennia of occupation. In order to understand the more complex picture of settlement development during the Old Kingdom as a whole, it is crucial to also investigate the evidence for towns in the provinces.

5.4 EVIDENCE FOR OLD KINGDOM SETTLEMENTS IN THE DELTA AND THE NILE VALLEY

The archaeological evidence for settlements dating to the Old Kingdom remains relatively limited, although cemetery evidence and textual data bear witness to a well-occupied Nile Valley. Little is known from the Delta, a fact that is principally a consequence of less archaeological fieldwork concentrated here as well as the difficult environmental conditions such as the high water table, which makes excavations costly and difficult. Settlements such as Kôm el-Hisn, Mendes, and Buto were evidently occupied during the Old Kingdom, but not much detail is available from them (Figure 5.1). At Kôm el-Hisn, a small settlement quarter has been excavated; it indicates the presence of a community involved in cattle raising.¹⁹³ Equally little is known of Mendes – which must have been an important provincial capital during this period too – in relation to the actual town, apart from the temple and cemetery area.¹⁹⁴ Similarly, the site of Tell Ibrahim Awad has yielded important results in regard to the early temple sequence, including a nearby cemetery, but there is no information about the actual town.¹⁹⁵ Wall fragments dating to the late Old Kingdom have recently been excavated at Buto, but only a few remains have been excavated beneath those of later settlement.¹⁹⁶ The extensive drill-core survey that has been conducted at the site has shown evidence for the concentration of Old Kingdom layers along the western edge of Kôms A and C.¹⁹⁷

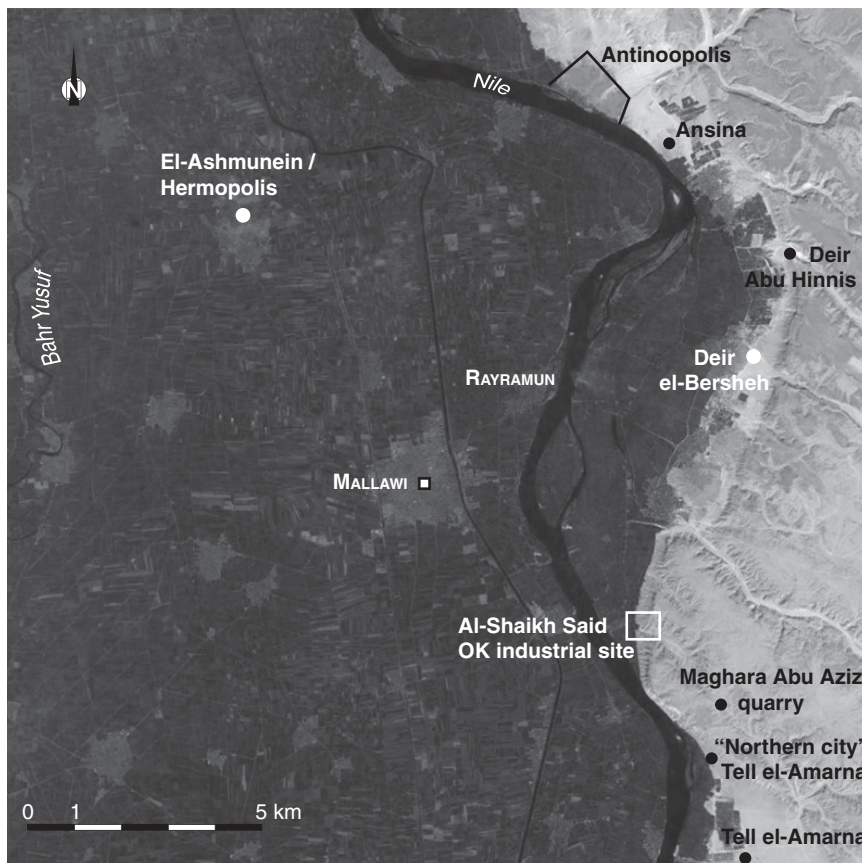
The settlements that are known in more detail and provide evidence for flourishing urban centers in the provinces are mainly located in the Nile Valley. They functioned as capitals of the various provinces, which are also called nome capitals.¹⁹⁸ For most of Middle Egypt, a region stretching from Assiut up to Memphis in the north, the existence of these towns can mainly be indirectly inferred from the location of prominent cemeteries that contained decorated and inscribed rock tombs. Such cemeteries occur both in Middle and Upper Egypt and all date to the second half of the Old Kingdom, when a new elite became well established in the provinces and the position of nomarch was hereditary. One of the few towns for which the exact location during the Old Kingdom is known lies close to modern Minya. It is located on the east bank of the Nile close to the villages of Zawiet Sultan and Zawiet el-Meitin and was in ancient times the capital of the sixteenth Upper Egyptian nome

called Hebenu (Figure 5.1).¹⁹⁹ Only a few structures have been cleared at the site dating to the Old Kingdom, and the size as well as the character of the town is difficult to determine (Figures 7.1 and 7.2). However, it has produced some interesting information about its development during the transitional period between the late Old Kingdom and the First Intermediate Period.²⁰⁰

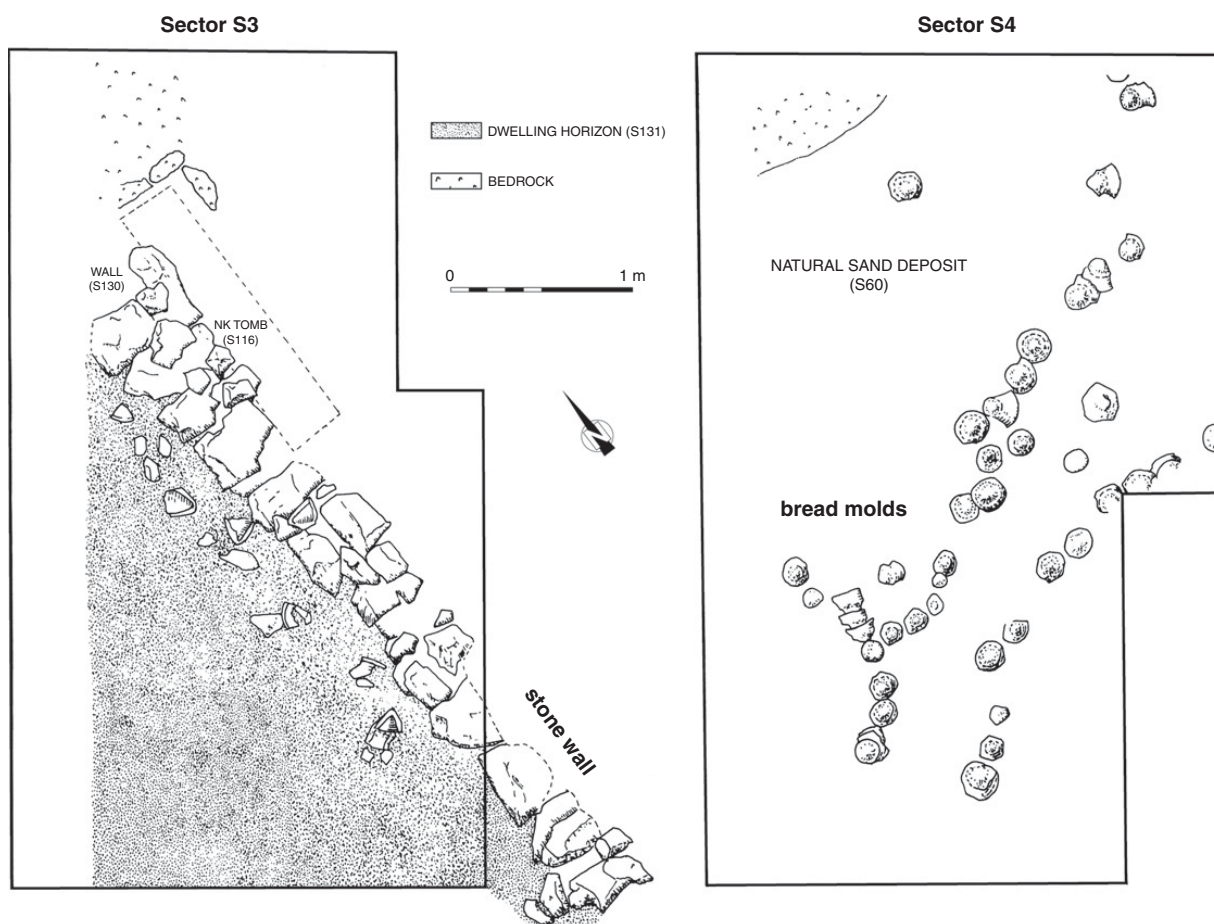
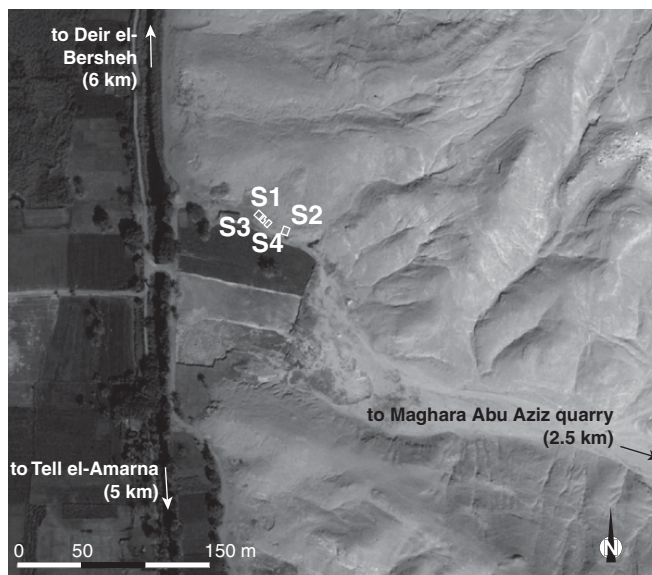
Apart from these provincial towns, there is also new evidence for a state-founded settlement that belongs to the category of workmen and production sites in Middle Egypt. A recent excavation at Al-Shaykh Sa'id and Wadi Zabayda by the Dutch mission from Leiden University, directed by Harco Willems, has explored the local rock-cut cemeteries and the area along the low desert escarpment that yielded much activity dating to the Old Kingdom. Situated at the mouth of Wadi Zabayda, a site with much evidence for large-scale bread production has been discovered (Figures 5.29 and 5.30). Thick refuse and ash deposits cover the area, as well as a substantial number of Old Kingdom bread molds. Fragments of clay

sealings showing imprints with the name of Khufu that were found in the same area provide a relatively precise date for the functioning of this installation.²⁰¹ However, little architectural remains have been excavated that could shed some light on the layout of this settlement. In close relation to the food production site lies a stone manufacturing area that processed limestone and calcite alabaster from the nearby quarries. This production site functioned during the first half of the Old Kingdom, and the excavator proposed that it is might be an example of a royal domain in the provinces.²⁰² The lack of buildings at this site makes any further interpretation as to its precise status extremely difficult, but it is clear that it was a large installation with production facilities on an industrial scale founded by the Old Kingdom state.

Although the situation in Middle Egypt and the Delta is less than satisfying, Upper Egypt has a few more examples to offer (Figure 5.1). The best-explored settlement remains dating to the Old Kingdom are located at Elephantine, where a few remains of the earlier Old



5.29. Satellite view of the region around Deir el-Bersheh. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after H. Willems et al., "An Industrial Site at Al-Shaykh Sa'id/Wadi Zabayda," *Ägypten und Levante* 19 (2009), fig. 1.



5.30. Location of the trenches and details of the Old Kingdom “industrial site” (S4) at Al-Shaikh Said. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after H. Willems et al., “An Industrial Site at Al-Shaykh Sa’id/Wadi Zabayda,” *Ägypten und Levante* 19 (2009), 305, fig. 6.

Kingdom have also been unearthed. This town will be discussed in more depth in the [next section](#). Further to the north, at Kôm Ombo, several wall remains and the presence of a large settlement mound indicate the presence of another important settlement, but no further archaeological details concerning size, layout, or even chronology are currently known.²⁰³ At Tell Edfu, the capital of the second Upper Egyptian nome, the Old Kingdom is equally present and visible in the almost-vertical cuts left by the sebbakhin.²⁰⁴ At Dendera, the ancient town must have encompassed a continuous occupation dating from the Early Dynastic Period to the First Intermediate Period, which again can mainly be deduced from the numerous mastabas that have been found along the low desert edge adjacent to the settlement area.²⁰⁵ The ancient town of Abydos is another important urban center, and it shows settlement remains dating back to the earlier Old Kingdom but those have been little explored.²⁰⁶

As can also be seen from this brief outline, there are currently only a few examples that can be analyzed in sufficient depth within the context of this study, and those will be discussed in the following sections.

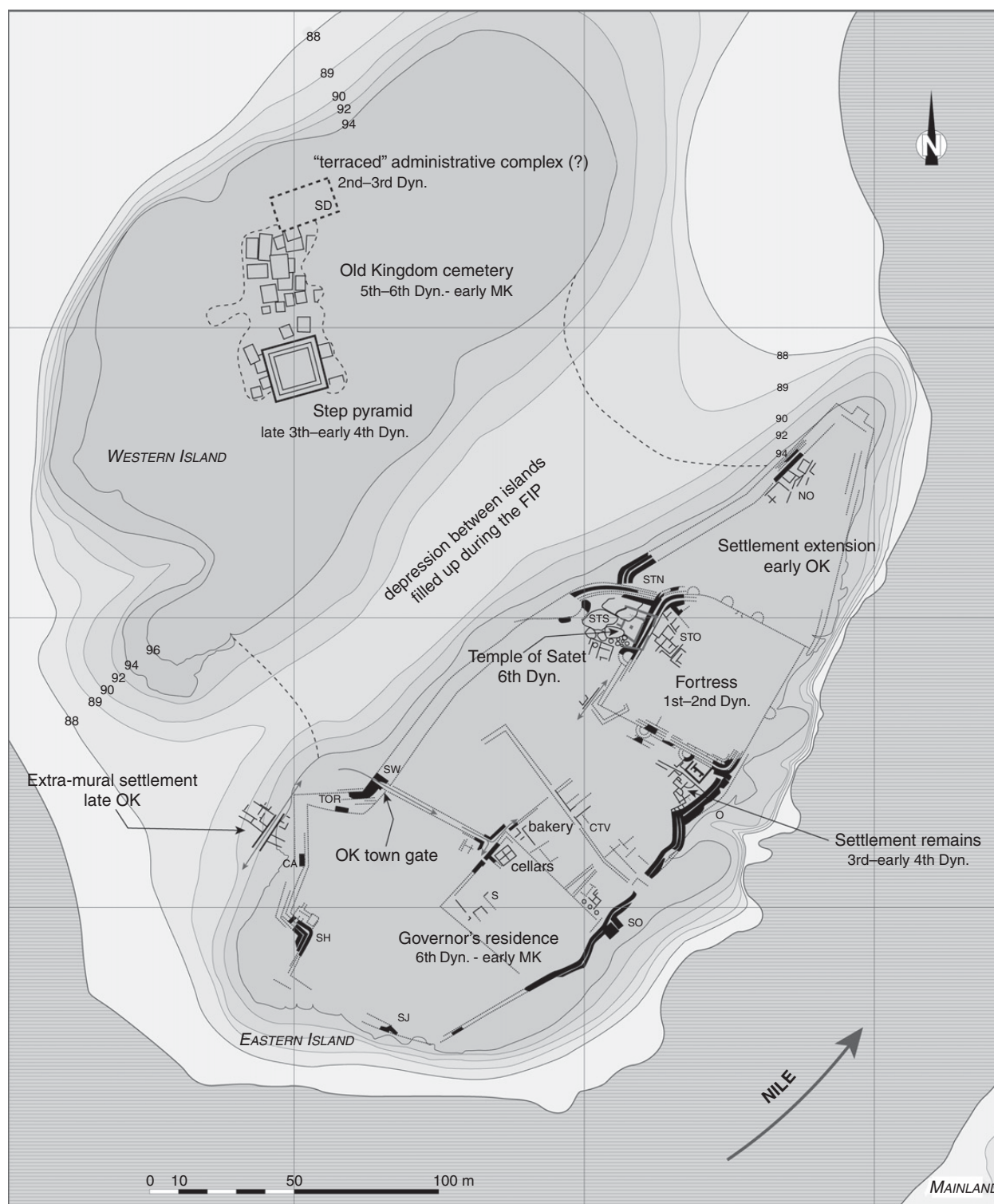
5.4.1 Elephantine

The largest excavated settlement with Old Kingdom remains is certainly the island of Elephantine, which has been explored in much depth by the German Archaeological Institute since 1969. The archaeological evidence for Old Kingdom settlement at Elephantine is restricted to small excavation areas, often in the form of deeper trenches that were dug into the tell in places that were accessible between later temple buildings and modern construction, such as the museum buildings. Probably the largest exposure lies in the vicinity of the temple of Satet and the Early Dynastic fortress, which have been excavated in much detail.

As already introduced in the [previous chapter](#), this island is situated in the First Cataract region, an area that had been the southern frontier for most of ancient Egyptian history. The geography of the island, which was used for settlement, is certainly different from other sites in the Nile Valley, but it was considered advantageous enough for millennia so that a tell developed. The island's geology is marked by the presence of large granite boulders, and the space in between these rocks was often intentionally filled up to create a more-or-less even foundation for buildings. The highest-lying parts of the

eastern island were clearly deemed to be the most advantageous ones by the early settlers and therefore the first to be inhabited ([Figure 5.31](#)).²⁰⁷ Initially, strategic considerations might have played an important role for the foundation of this town and the interests of the Egyptian state, which is marked by the establishment of a fortress during the First Dynasty.²⁰⁸ From there, settlement spread northward, up to where the modern museum now stands, and to the south ([Figure 5.31](#)). However, during the entire Old Kingdom period, Elephantine saw much development and a fair amount of growth, leading to the entire eastern island being occupied by settlement. It was surrounded by a thick mud-brick enclosure wall, which constitutes one of the typical features for early settlements in the Nile Valley ([Figure 5.31](#)). By the end of the Old Kingdom, a thick mud-brick enclosure wall encircled the town on all sides, with a major fortified gate in the southwestern part of the site that could easily be reached from the southern boat landing site ([Figure 5.31](#)). The temple dedicated to the goddess Satet, which became one of the main sanctuaries of the town, is situated at the heart of the settlement. Its remarkable evolution from a small cult place between the granite boulders to a fully developed sanctuary by the end of the Old Kingdom has been reconstructed according to the results of the excavations. Those revealed several consecutive phases of temple structures, especially the earliest phases dating to the third millennium BCE that had been filled in by later temple buildings and were thus relatively well preserved underneath.²⁰⁹ The temple had, since the Early Dynastic Period, been a focus of the local community, which was responsible for its upkeep, while royal patronage gradually becomes visible toward the end of the Old Kingdom.²¹⁰ Settlement remains including storage facilities to the south of the temple of Satet have been interpreted as outbuildings of the temple, but it is equally possible that they were part of the town without any particular link to the sanctuary.²¹¹ The full integration into the wider economic network of the country, which coincided with the erection of a large stone temple, is not attested before the Middle Kingdom.²¹²

On the western side, the island was limited by a prominent depression that separated Elephantine into two islands at least until the First Intermediate Period, when first attempts were made for the expansion of the town westward ([Figure 5.31](#)). Thus, as far as settlement development goes, Elephantine is probably quite a special case, because it was very much restricted by its geographical



5.31. Plan of Elephantine during the Old Kingdom and the First Intermediate Period. By G. Marouard, after M. Ziermann, *Elephantine XXVIII: Die Baustrukturen der älteren Stadt (Frühzeit und Altes Reich). Grabungen in der Nordoststadt (11.-16. Kampagne) 1982-1986*, AV 108, 2003, fig. 1.

location. The western island remained empty of domestic settlement during the third millennium BCE, but sometime during the advanced Fifth Dynasty, a cemetery was established in the area adjacent to the late Third Dynasty step pyramid (Figure 5.32).

5.4.1.1 *Third Dynasty step pyramid and administrative building on the western island*

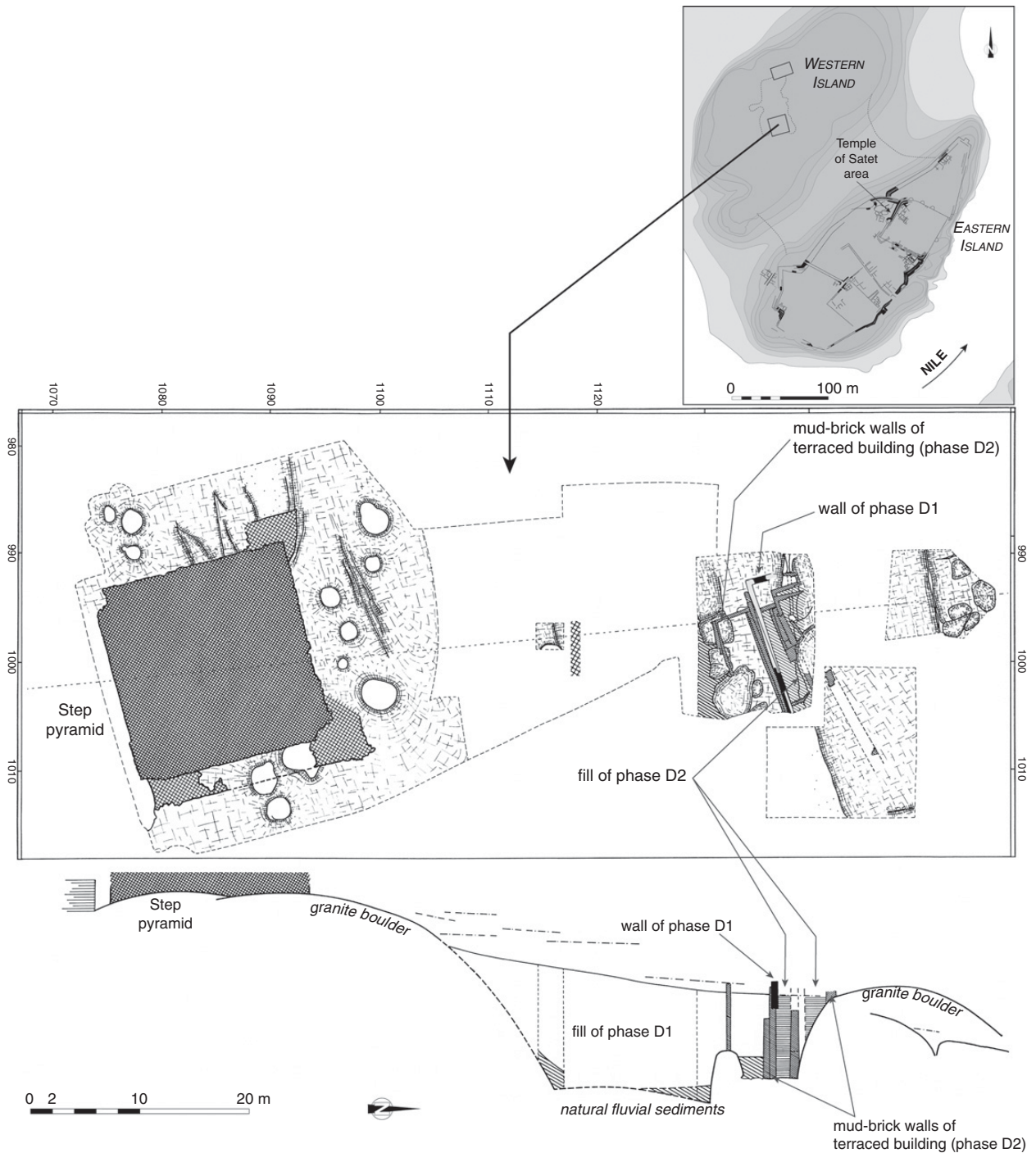
Apart from the Early Dynastic fortress on the eastern island, which seems to have been an initiative by the early state, links to the power at Memphis during the Old Kingdom have been attested at Elephantine through the discovery of numerous sealings and seals during the excavations.²¹³ Remains of a small step pyramid are currently a prominent feature in the western part of the site of Elephantine that formerly was a separate island (Figure 5.32). This pyramid was not used as a burial place but instead functioned as an important royal marker

within the region. It has been dated to the reign of Huni, last ruler of the Third Dynasty, and must have been a prominent feature on the landscape and probably linked to a cult for the king.²¹⁴ It belongs to a series of almost-identical step pyramids that have been found close to, but not directly at, important regional towns.²¹⁵

Further evidence for an official/administrative structure has been discovered about 40 m north of the pyramid, where remains of a large mud-brick building have been found. Its exploration was unfortunately limited to several walls and waste dumps that are contemporary to the use of this structure (Figure 5.33). However, its administrative function has been confirmed by several pieces of evidence. The architecture is quite peculiar, and the use of large-format mud bricks for the walls can be associated with official buildings.²¹⁶ The size of the whole building has been estimated to cover about 375 m², but only a very small proportion of it is still preserved. Attached to its southern side, it is possible to see a terraced



5.32. View of the eastern side of the step pyramid (end of 3rd–early 4th Dynasty) on the western island at Elephantine. Photo by the author.



5.33. Plan and section of the step pyramid (end of 3rd–early 4th Dynasty) and the “terraced” administrative building (2nd–3rd Dynasties) on the western island at Elephantine. By G. Marouard, after S. Seidlmayer, “Die staatliche Anlage der 3. Dynastie in der Nordweststadt von Elephantine. Archäologische und historische Probleme,” in M. Bietak (ed.), *Haus und Palast im Alten Ägypten*, Wien 1996, 197, Abb. 2.

construction, lying slightly lower than the main building and forming a kind of courtyard, which compensates for the variations in the ground level due to the island’s

natural granite boulders. Further evidence for its administrative function comes from the finds excavated in the nearby refuse layers, which contained pieces of clay

sealings but also large quantities of bread molds and beer jars. The layout, size, and careful construction technique already indicate that this was not a domestic building but had an official and possibly administrative function. The building was cleared out before its abandonment, and objects associated with the two occupational phases that have been recognized here were found in waste deposits around the building between the rock boulders.

The discovery of a papyrus sealing naming a “Seal bearer of Lower Egypt, arbitrator of/at the royal estate”²¹⁷ proves some correspondence between higher officials from the residence and Elephantine. Another sealing was impressed with a cylinder seal giving the Horus name of Sanakht, a lesser-known ruler of the Third Dynasty who might have been the predecessor of Huni.²¹⁸ The remaining twenty-four mud sealing fragments stem mainly from the opening of various types of commodities such as bags and storage vessels. Those do not really differ from contemporary examples found during the excavation of the settlement area on the eastern island of Elephantine.²¹⁹ They belong to the sphere of the local administration; no seal impressions from any official seal that would link the goods to regular deliveries from the capital have been noted. It is possible that this administrative building was used for collecting commodities from the settlement of Elephantine and its hinterland as taxes in order to be shipped to Memphis.²²⁰ The pottery related to this building comes mainly from a secondary context that is made up of a large fill layer used for leveling much of the ground in the area and probably originated from a thick refuse deposit in the vicinity. Here, considerable amounts of beer jars and the typical conically shaped bread molds were found, and more than 10,000 individual pots have been estimated for each category, among other types of coarse, utilitarian types of vessels such as bread trays, also used for bread production.²²¹ Fine wares were almost completely absent, apart from some bowls and dishes used for food consumption. The pottery dates mainly to the second half of the Third and into the early Fourth Dynasty, including the reign of Snofru.²²²

According to the excavators, there are two main phases of the building: an earlier one, D/2, followed by a slightly later one, D/1, that seems to be contemporary to the small step pyramid (Figure 5.33). In this respect, the location and the possible link between the two installations (pyramid and administrative building) need to be considered in relation to the settlement on the eastern island of Elephantine. Was it spatial considerations that

played a major role in the choice of location for the pyramid, or was it deliberately situated near an official administrative complex? Two of the other step pyramids that belong to the same group of structures have recently been reinvestigated, but no trace of an administrative building complex was discovered, suggesting that there is no specific link between the administrative complex and the pyramid. However, the pyramid at el-Ghoneimeya, situated south of Edfu, showed traces of a shrine or chapel on its eastern side similar to what is known from the pyramid at Seila in the Fayum region.²²³ This indicates that the primary purpose of the pyramid is linked to the royal cult.

The finds are clear evidence for the administrative character of this structure and suggest the presence of some kind of supply facility. The discovery of such an enormous amount of bread molds and beer jars indicates that a large production facility once stood somewhere nearby and operated on an industrial scale.

Thus, the current archaeological evidence, albeit sketchy, suggests the presence of a large bakery and brewery installation somewhere in the vicinity, with a possible connection to a storage facility and administrative unit. This would fit well with the evidence of having larger production and supply facilities along the margins of the main settlement, a phenomenon that has already been encountered for the Predynastic Period.²²⁴ It is also noteworthy that the western island at Elephantine was not enclosed by a town wall, which could also argue for the possible presence of peripheral installations such as production zones. From at least the Fifth Dynasty onward, it was used as the local cemetery.²²⁵

5.4.1.2 *The early Old Kingdom settlement near the former fortress*

The excavations and analysis of the fortress and the settlement of the third millennium by Martin Ziermann resulted in many new insights into the evolution of the early town at Elephantine.²²⁶ The early Old Kingdom settlement (early Third Dynasty to mid-Fourth Dynasty) on the eastern island is marked by the dismantlement and gradual integration of the fortress walls within the overall fabric of the town – including the buildings that once stood inside the older fortress into the larger settlement. The abandonment of the fortress at the end of the Second/early Third Dynasty certainly marked a turning point in the occupation of this part of the island. In front of the former southern entrance of the fortress, new mud-

brick buildings were constructed, forming a mix of residential and production facilities by the first half of the Third Dynasty. Several larger courtyards were found on the western side, while a residential-type building, Building A, was excavated to the east, near the town enclosure wall (Figure 5.34).²²⁷ These structures are characterized by a relatively spacious layout, but they are still built in the typical agglutinated fashion in which different building units share the same wall, a characteristic that has been noted at other Old Kingdom settlements too. Also typical seems to be the lack of any larger streets apart from a small pathway situated to the south of these buildings (see Figures 5.35 and 5.36). The courtyards contained several circular grain silos in their first phase of use, covering an area of about 350 m², which might be an indication for official/administrative use and not for domestic households (Figure 5.34). Ziermann points out that these courtyards and Building A to their east are much larger than what has been seen at other domestic quarters of the town.²²⁸ Building A shows an interior layout that is marked by two larger rectangular rooms and two long corridors on the eastern and western sides. The western corridor leads into some smaller rooms in the northern half of the building (see Figure 5.34). The excavators did not find any traces of fire places or storage installations, which to them has indicated an official function for Building A. The open courtyards to the west are, however, certainly related to Building A and could have formed some kind of outbuildings used for manufacturing activities and storage (Figure 5.34). In a second phase of construction, when the fortress towers had been completely taken down, an extension was built against the western side of Building A that consisted of another large rectangular room also being accessed by a long corridor with an entrance on the southwestern corner (Figure 5.35).²²⁹ To the north of the courtyards, Building D, which was less well preserved and accessible for excavations, also shows two long corridors that resemble those of Building A (Figure 5.36).²³⁰

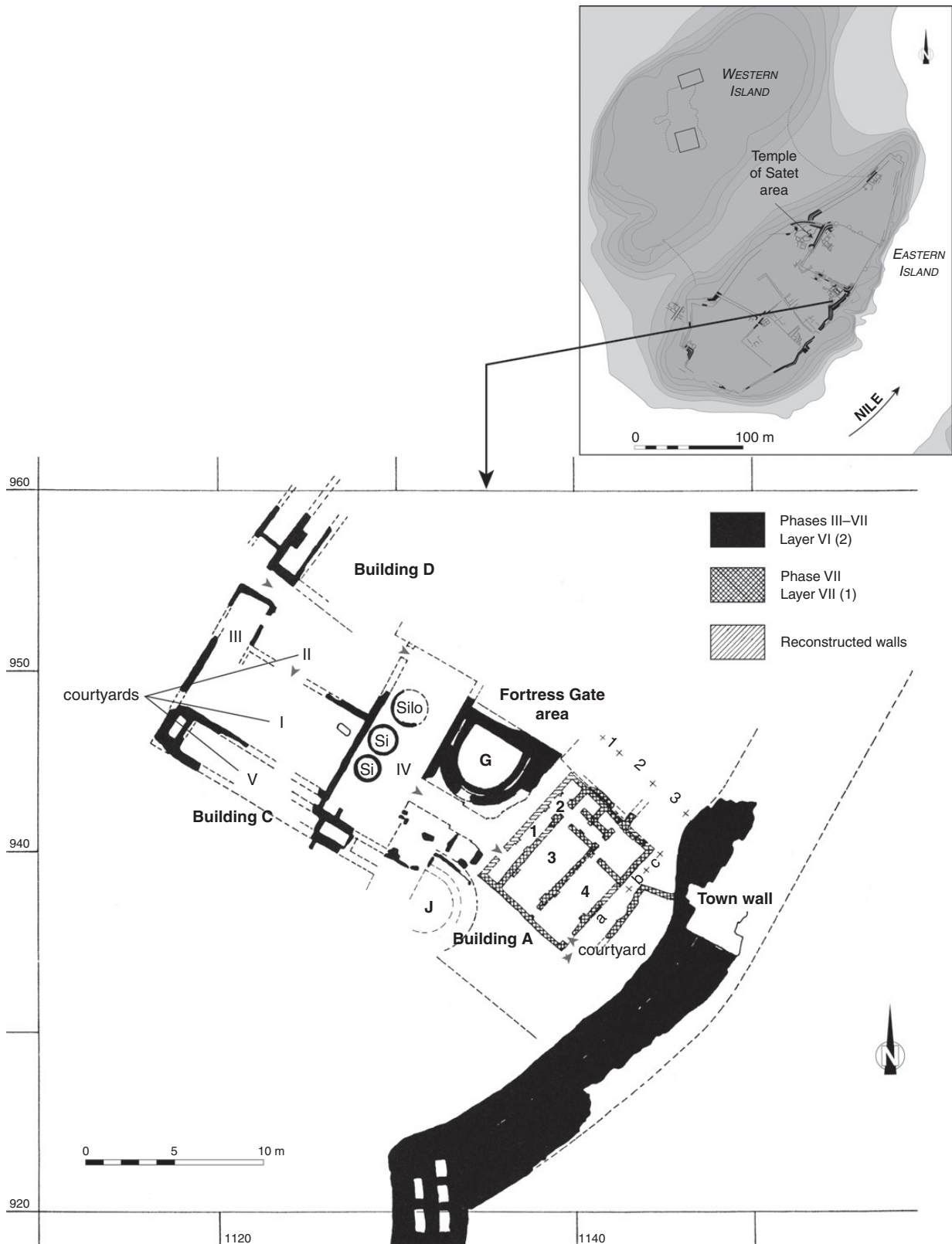
In the following phase of occupation, which dates to the second half of the Third Dynasty up to the early Fourth Dynasty, the courtyards to the west of Building A and the installations to the south were converted to a large stone workshop for the production of stone vessels (Figure 5.36). By the end of this phase, Buildings A and D were also integrated into the production facility, which by then covered an area of about 35 m by 50 m.²³¹ By the mid-Fourth Dynasty, the northern part of the large workshop was abandoned and replaced by another large

mud-brick building with possible administrative function according to the discovery of numerous clay sealings naming the rulers of the Fourth Dynasty (Khufu, Radjedef, Khafra, and Menkaura).²³²

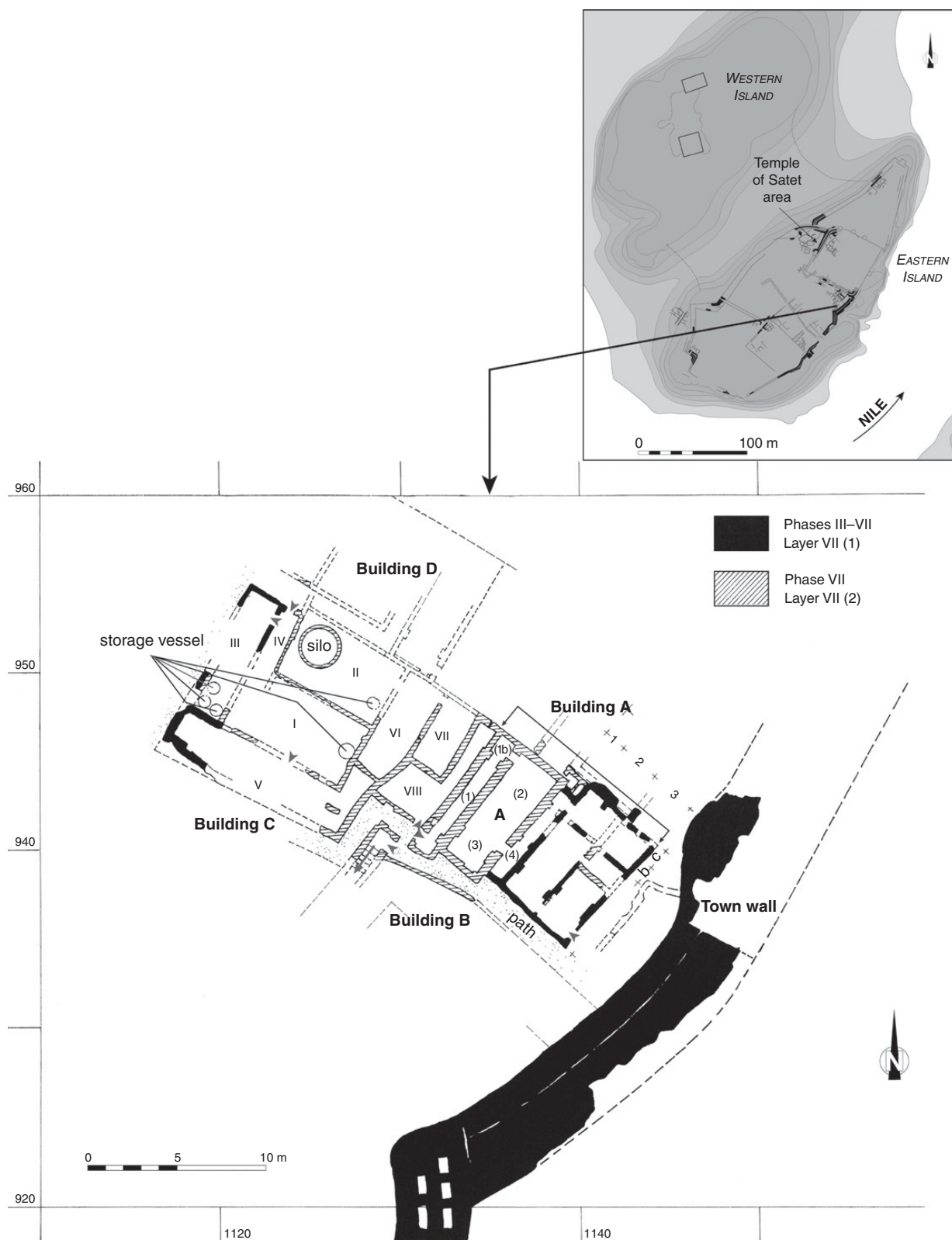
Thus, these building phases and mud-brick installations indicate the presence of a dynamic town quarter that was possibly linked to official use. Of interest in this respect is the analysis of the layout of Building A and its comparison with other buildings of the Old Kingdom.²³³ The later evolution of this town quarter is not clear because of the disturbance of the archaeological remains created by subsequent building work, foremost that of the temple of Khnum.

5.4.1.3 *Settlement remains on the exterior of the town wall in the south part of the eastern island*

From the Third Dynasty onward, there were also attempts being made to establish better access from the landing place on the river banks that seems to have existed to the south of the settlement in an area that was frequently flooded. Only a few remains have been excavated of a wall made of granite blocks that protected a long passage leading up to the gate of the town. Due to the constant threat by floodwater, this pathway was filled up during the Fourth Dynasty to create a higher ground in order to make better use of this area for settlement – probably attractive to people due to its proximity to the landing place near the river where people would arrive on the island and approach the town. Elephantine certainly had an important role to play in trade from and to Lower Nubia. Thus, elevating the access and the area along the southwestern side of the island provided new space for installing mud-brick buildings on a more permanent basis than was the case before the late Fourth/early Fifth Dynasty.²³⁴ By the Sixth Dynasty, a north–south street was built here that led straight into the ancient town and became the main axis through the settlement for the following periods. Mud-brick buildings flanked both sides of this street, which had a width of 2 m (Figure 5.37).²³⁵ To the southeastern side, three rooms with cellars that had a vaulted roof construction have been excavated. One of the rooms had a scatter of flint chips and some tools lying on the floor. The southwestern side was also occupied by a building of which three rooms have been fully excavated. Evidence for large-scale food production and cooking facilities have been discovered, which has led to this building being interpreted as a communal kitchen.²³⁶



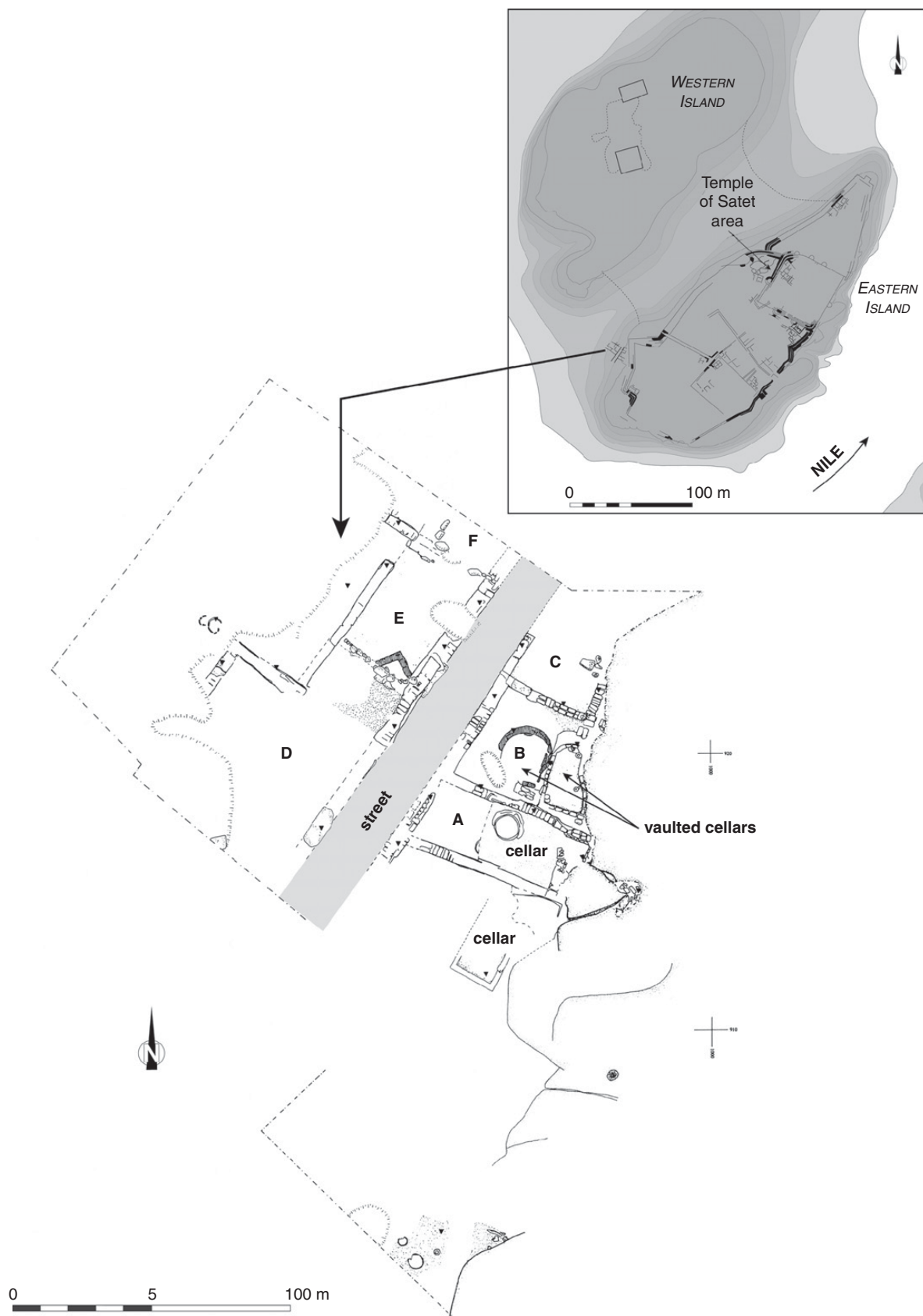
5.34. Plan of the Old Kingdom settlement remains (early 3rd Dynasty), south of the former fortress gate on the eastern island at Elephantine. By G. Marouard, after M. Ziermann, in Kaiser et al., "Stadt und Tempel von Elephantine, 25./26./27. Grabungsbericht," *MDAIK* 55 (1999), 72, Abb. 2.



5.35. Expansion of houses and courtyards (3rd Dynasty) in the Old Kingdom settlement area, south of the former fortress on the eastern island at Elephantine. By G. Marouard, after M. Ziermann, in Kaiser et al., “Stadt und Tempel von Elephantine, 25./26./27. Grabungsbericht,” *MDAIK* 55 (1999), 73, Abb. 3.



5.36. Houses and courtyards (late 3rd–early 4th Dynasty) in the Old Kingdom settlement area, south of the former fortress on the eastern island at Elephantine. By G. Marouard, after M. Ziermann, in Kaiser et al., “Stadt und Tempel von Elephantine, 25./26./27. Grabungsbericht,” *MDAIK* 55 (1999), 78, Abb. 5.



5.37. Extramural settlement remains (6th Dynasty) outside the main gate, eastern island at Elephantine. By G. Marouard, after A. Klammt, C. Heitz, in G. Dreyer et al., “Stadt und Tempel von Elephantine, 28./29./30. Grabungsbericht,” *MDAIK* 58 (2002), 138, fig. 2.

These settlement remains form a sort of ante-town (“Vorstadt”) to the fortified settlement.²³⁷ This is not only a sign for an expanding town on the exterior of the fortified zone but probably also evidence for much frequentation from the south in terms of people arriving for trade by boat at the landing place. The presence of settlement activity here is also related to the specific geography of the island: the eastern side consists of a steep slope hardly accessible from the river, while the grade was much gentler to the south.

5.4.1.4 *The earliest phases of the “governor’s residence”*

Further evidence for a prospering Sixth Dynasty town and the presence of a well-established elite with strong ties to the central governments in Memphis comes from a major mud-brick building of official or even palatial character (“governor’s residence”) situated in the south-eastern part of the island, near the highest point of elevation of the tell. It was located at an important node between two major streets of the town (Figure 5.31). One of them leading directly up to this building complex was linked to the fortified gate through the town enclosure wall on the southwestern side of the settlement. This street led straight up to the east and turned 90 degrees to the north in front of the entrance, toward the temple of Satet. This prominent location on the eastern island provided good evidence for the presence of an important building complex within the town, which was further confirmed by the excavations in this area.

Although in terms of archaeological evidence the foundations of this complex probably date back to the Sixth Dynasty,²³⁸ the excavated archaeological remains concern mainly the later phases of occupation and their evolution, which date to the First Intermediate Period and early Middle Kingdom.²³⁹ There is also some evidence for older predecessor buildings dating as far back as at least the Fifth Dynasty: this includes several inscribed objects showing the name of Unas that have been found within a later deposit of offerings/cult objects here (Figure 7.7). The current building complex – of which only the western wall, the northwestern corner, and about 1.3 m of stratigraphy inside the building remain because of the seabkh digging – seems to have played a major role in the emergence of the *ka*-cults established for certain governors of Elephantine. The most prominent among these officials was Heqaib, who lived during the reign of Pepi II and became a local saint after his death.²⁴⁰ The overall size of the whole building complex is not known, but it has been

estimated according to further wall remains and production areas that were attached to its northern side to have at least occupied an area of 20 m by 30 m. Its rear wall probably stood next to another north–south street adjacent to the eastern section of the town wall (see Figure 5.31).

The archaeological evidence indicates that this building complex possibly stands in a long tradition of administrative buildings in this area. Large amounts of broken clay sealings stamped with royal names of some of the Fourth Dynasty rulers are further evidence for administration linked closely to the royal residence; they had been discarded, together with settlement waste, filling the gaps between the rock boulders in this area in order to level the ground.²⁴¹ These large refuse deposits certainly came from a structure in the vicinity, and the way the heaps were formed by the deposits, with a visible slope from the north to the south, the location of such a building was certainly to the north of the late Old Kingdom governor’s residence.

In terms of the evolution within the town of Elephantine, the establishment of an official/administrative quarter probably started south of the Early Dynastic fortress and gradually shifted southward.²⁴² Such a long-term use of certain town quarters that consist of building complexes with administrative and official functions – but also including residential units, as is implied by the “governor’s residence” – is not restricted to the town of Elephantine but has parallels at other sites.²⁴³ The currently best-preserved example of a governor’s residence/palace dating to the late Old Kingdom has been excavated at the settlement of Ayn Asil/Balat in the Dakhla Oasis.

5.5 OLD KINGDOM SETTLEMENTS IN THE MARGINAL REGIONS OF EGYPT

As can be seen from the Memphite region, the ancient Egyptian state was much invested in founding new settlements and installations that served the economic interests of the central government. These sites were clearly integrated into the wider economic system and attracted a fair amount of inhabitants. However, the Memphite region is not the only area where the state founded settlements. There is much evidence that Old Kingdom rulers from at least as early as the reign of Khufu set up an infrastructure to facilitate the exploitation of raw materials and sent out expeditions for long-distance trade. The following sites belong to this category, and especially the evidence from the Dakhla Oasis shows the well-established network in place during much of the third millennium BCE. Although it is usually the

Middle Kingdom that is credited as a period when the Egyptian state was much involved in town planning, the rulers of the Old Kingdom had already taken many steps in the same direction, except that the sites and settlements that were founded by them do not show a preplanned, orthogonal layout – with the one exception of the Khentkawes town at Giza. As the evidence stands now, it can be concluded that the Old Kingdom state was much involved in the foundations of settlements and campsites that served the needs of the rulers at Memphis.

Two harbor sites and way stations dating to the Old Kingdom have been excavated at the Red Sea coast (Figures 5.1).²⁴⁴ The site of Ayn Soukhna is situated 60 km south of Suez and saw two main periods of activity – one dating to the Old Kingdom and the other to the Middle Kingdom. This harbor site provided an important point of departure for mining expeditions into the Sinai for copper and turquoise (Figure 5.38). The presence of numerous rock-cut galleries in the nearby cliff formation provides evidence for the storage of dismantled boats and other supplies needed for the expeditions. A small installation of several buildings was found further toward the seashore at Kôm 14, next to a deep trench that resembles a boat pit and was probably used for assembling boats. The second site, Wadi el-Jarf, is situated further to the south, at about 90 km south of Ayn Soukhna, and consists of several distinct components that include a gallery complex, a quay, and a camp area on top of the desert plateau overlooking the beach area toward the quay and several harbor facilities. Halfway between the seashore and the gallery complex, a large, isolated building has been found. Its function has not yet been fully understood.²⁴⁵ These two sites, Ayn Soukhna and Wadi el-Jarf, provide additional insight into the central government's efforts toward establishing important camps and smaller temporary settlements as part of a larger undertaking to support expeditions and provide the necessary logistical backing for their successful conduct.

In the oasis of Dakhla, which is situated in the Western Desert, two Egyptian settlements have been discovered – at Balat/Ayn Asil²⁴⁶ and Ain el-Gazzareen²⁴⁷ (Figure 5.39) – that will be discussed in depth in the next section. They represent remarkable attempts by the Egyptian state to take control of marginal regions.

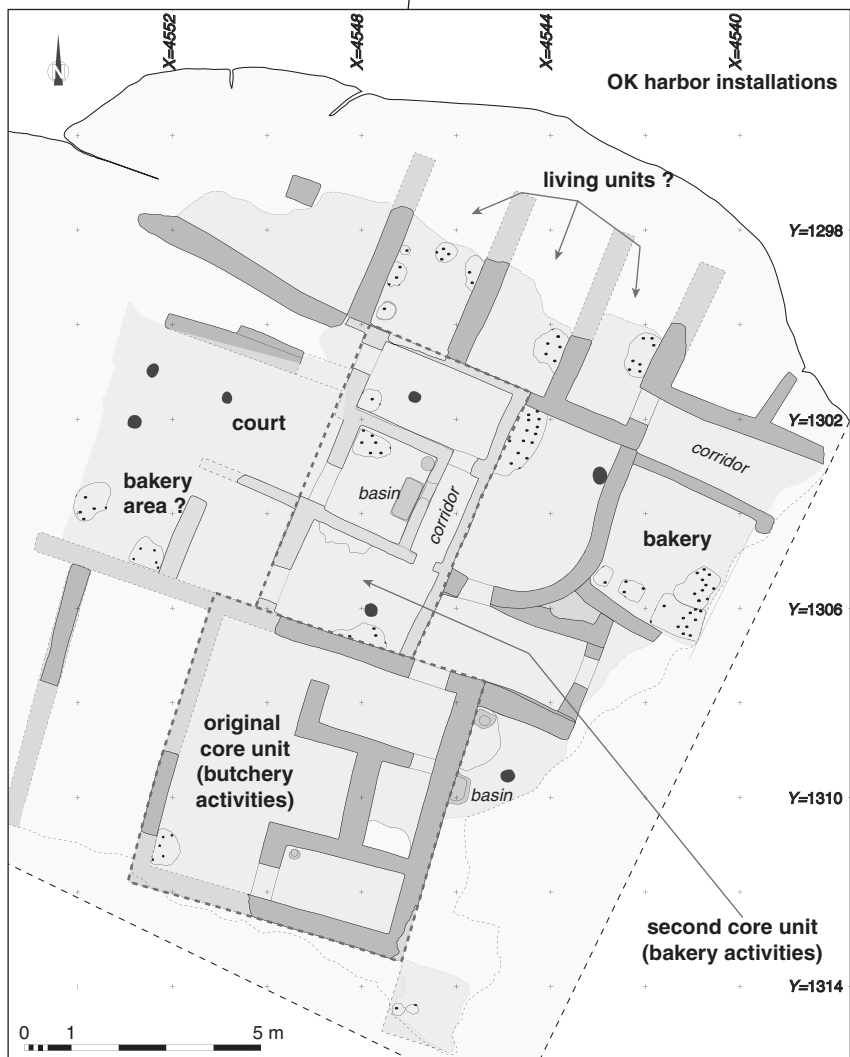
5.5.1 The late Old Kingdom town and palatial complex at Ayn Asil/Balat in the Dakhla Oasis

This close association between a building complex of palatial dimensions for the highest officials – usually the

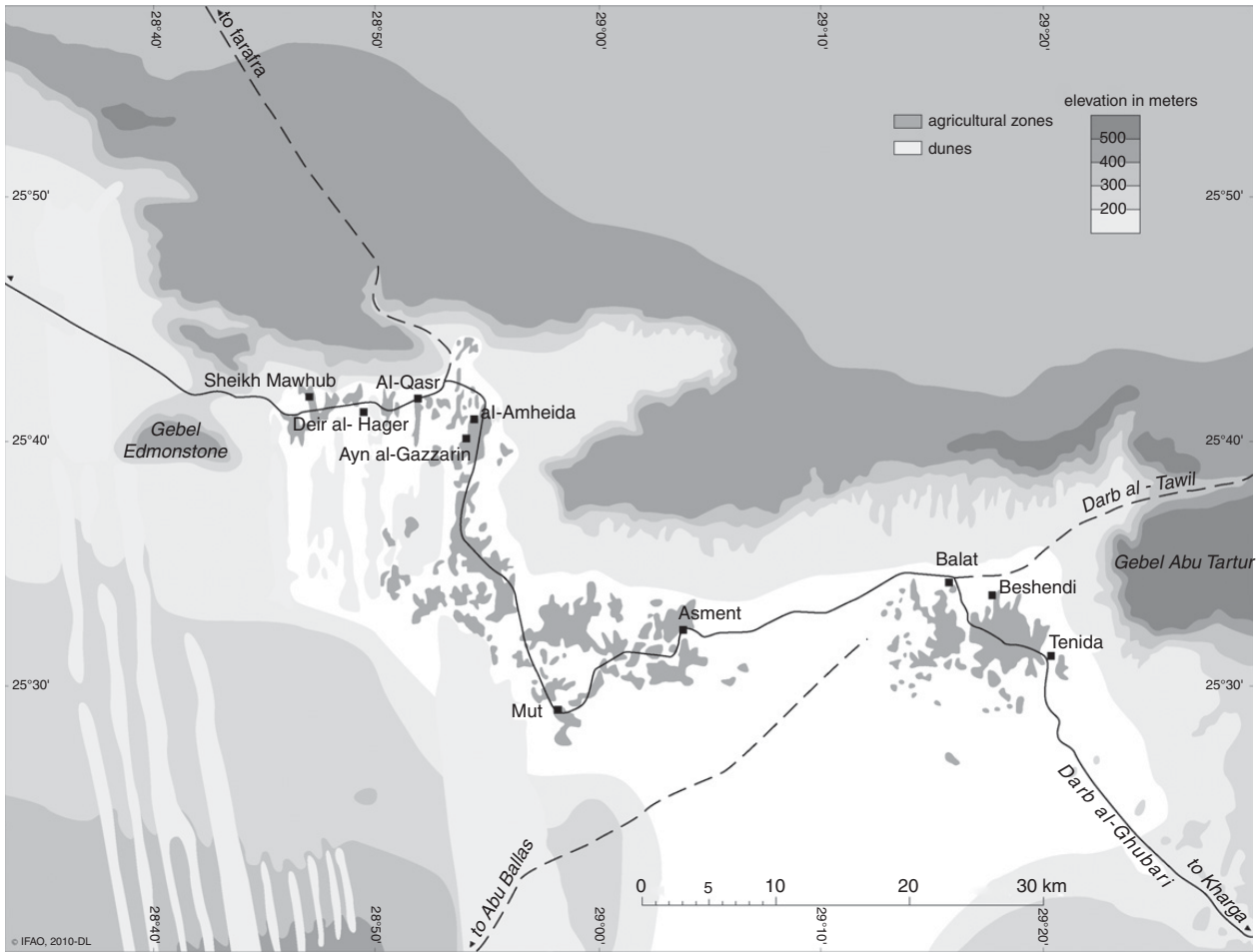
mayor or governor of the town and his family as well as staff – containing discrete production, storage areas, and cult installations has also been discovered at the so-called governor's palace at Ayn Asil/Balat in the Dakhla Oasis (Figure 5.40). The ongoing excavations led by Georges Soukiassian of the French Institute in Cairo (IFAO) have focused mainly on this palatial complex.²⁴⁸ In fact, both the mayoral complex at Elephantine and the one at Ayn Asil were certainly part of the same tradition dating to the end of the third millennium BCE.²⁴⁹

The governor's palace at Ayn Asil is the central element of a larger settlement that was established probably as part of a wider royal initiative to take control of the more distant but economically important zones outside of the Nile Valley. The oases in the Western Desert are known to have been part of a large trade network that extended to the west and south, and establishing an Egyptian settlement at Dakhla had its obvious advantages.²⁵⁰

The oldest phase of settlement at Ayn Asil is characterized by a large fortified enclosure in the northern part of the site that was constructed during the early Sixth Dynasty (Figure 5.40). It seems to have contained the first residence of the governors and seen several phases of modifications and reinforcement over time, up to the reign of Pepi II at the latest.²⁵¹ The first phase of the northern enclosure is marked by a 2 m thick mud-brick perimeter wall following a square layout and measuring 171 m along each side. Relatively early on, the northern enclosure underwent a reinforcement of an additional wall layer, which increased its thickness to 4 m. Four round towers have been excavated along its southern side, emphasizing its fortified character (Figure 5.41a).²⁵² The northern enclosure was then enlarged, first to the west and then toward the south, in at least two phases. The enlargement to the south is the most remarkable of these extensions and contains a new palatial complex stretching over 220 m from north to south and 95 m from east to west. It was founded during the reign of Pepi II and is marked by two perimeter walls – the so-called inner and outer enclosures (Figure 5.42). The inner enclosure contains the main buildings, including the two residential apartments of the governors, while the outer enclosure surrounds the western part of the complex, with the *ka*-chapels and related outbuildings (Figure 5.43).²⁵³ Two main entrances into this large compound have been excavated so far. One leads through the outer enclosure situated at the northwest corner, providing direct access to several *ka*-chapels dedicated to the cult of the governors (Figure 5.41b). The other important gate area was found along the southern limits of the complex



5.38. Location and plan of the Old Kingdom buildings (late 4th–late 5th Dynasty) of the Kôm 14 at Ayn Soukhna. Courtesy of G. Marouard.

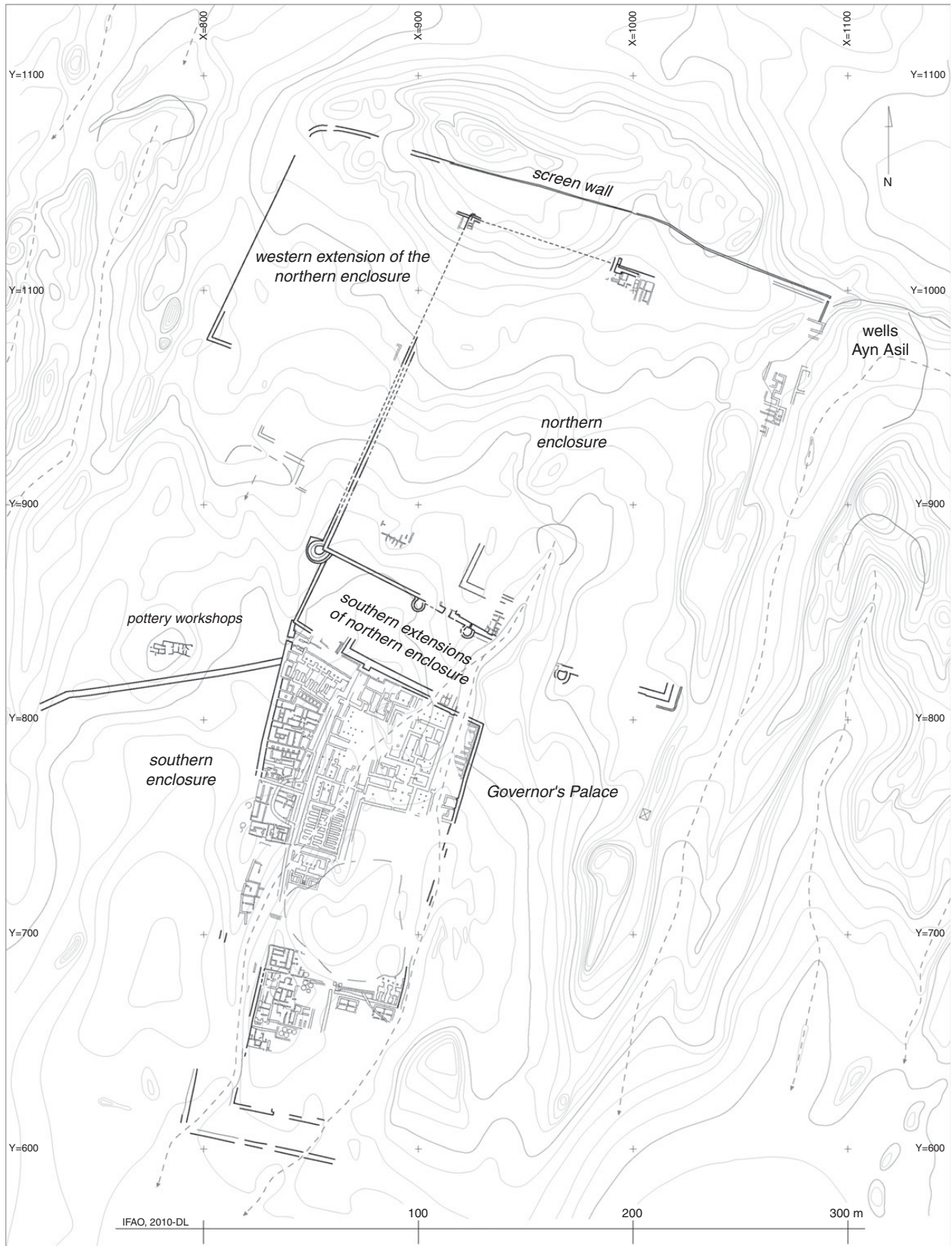


5.39. Map of the Dakhla Oasis. After D. Laisney, *Balat IX. Cartographie de Balat*, IFAO 61, 2010, 28, fig. 13.

(Figure 5.42). An additional enclosure wall can be seen to the west of the palatial complex, just south of the pottery workshop area, which has also been dated to the reign of Pepi II (Figure 5.42). No traces of any specific structures have been noted in this area so far; its precise purpose remains unclear, awaiting further fieldwork.

The main focus of the ongoing fieldwork has been the southern extension containing the large palace complex of the governors of the oasis. So far it is not clear when the northern enclosure fell out of use – probably sometime during the reign of Pepi II – and if its use had a period of overlap with the extensions of the palace further south. The first extension immediately to the south of the northern enclosure was characterized in its earliest phase by an enclosed area measuring 40 m in a north–south direction that gradually saw the construction of mud-brick buildings over the older walls of the northern enclosure, which had lost their fortified purpose by then. Shortly after this first

expansion of the settlement southward, a second extension was made to its west, this one characterized by the erection of the first *ka*-chapel (Chapel 4; see Figure 5.42).²⁵⁴ Only the third phase of expansion is related to the construction of a large palatial complex.²⁵⁵ The complex was the principal seat of the local governors in charge of the oasis during the late Old Kingdom, and it functioned without break until the early Middle Kingdom. There is much evidence that this complex united several functions – such as residential, administrative, and economic but also cultic – witnessed by the presence of seven *ka*-chapels dedicated to the cult of the governors, including the related outbuildings for the upkeep of the cult (Figure 5.41b).²⁵⁶ The good preservation of the archaeological evidence, which is in part linked to a major conflagration that caused a certain degree of destruction within this complex, confirms what has already been noted in relation to the contemporary governor's residence at Elephantine. The case



5.40. Plan of Balat – Ayn Asil. After D. Laisney, *Balat IX. Cartographie de Balat*, FIFAO 61, 2010, 33, fig. 16.



5.41a. Round tower of the northern enclosure (6th Dynasty) at Ayn Asil. After D. Laisney, *Balat IX. Cartographie de Balat*, IFAO 61, 2010, 51, fig. 30. Photo IFAO, A. Lecler.

of Ayn Asil has the advantage of allowing for the analysis of the architecture, while at Elephantine almost no structural remains have been preserved.

Several radiocarbon dates have been obtained for the period of use of the Ayn Asil complex and its different phases of occupation. The oldest phase (I) ended around 2175 BCE, which corresponds to the end of Pepi II's reign or the very early First Intermediate Period and is marked by a violent conflagration.²⁵⁷ This led to the abandonment of the northern half of the complex, including the residential apartments, while in the southern part there is much evidence for the continuation of occupation, marked by new constructions and the reorganization of this zone, which continued to functioned as a governor's seat of administration.²⁵⁸ The second and third phases of occupation are postconflagration and encompass the entire First Intermediate Period and into the early Middle Kingdom.²⁵⁹ The following archaeological evidence, which is discussed within the framework of the current chapter, principally concerns the late Old

Kingdom phase (Phase I) of the palatial complex at Balat. This phase ends with the incident of the large fire that destroyed especially the residential apartments in the northern half of the complex.²⁶⁰

The northern half of the complex, which was inhabited by three generations of governors, is marked by two residential "apartments" – one to the east that was constructed slightly earlier than the second one, to the west (Figure 5.42). The finds made in various rooms and courtyards of both apartments show that while there is clear evidence for residential use, some areas – such as the large peristyle court in front of the portico at the western apartments – were used for administrative activities.²⁶¹ Thirty-one clay tablets, inscribed with administrative notes and kept in a wooden box, have been found here.²⁶² These tablets are a unique form of record keeping found so far only at Ayn Asil. Similar clay tablets containing lists and administrative records have been found in several other areas of the palatial complex, frequently near important doorways connecting different parts of the



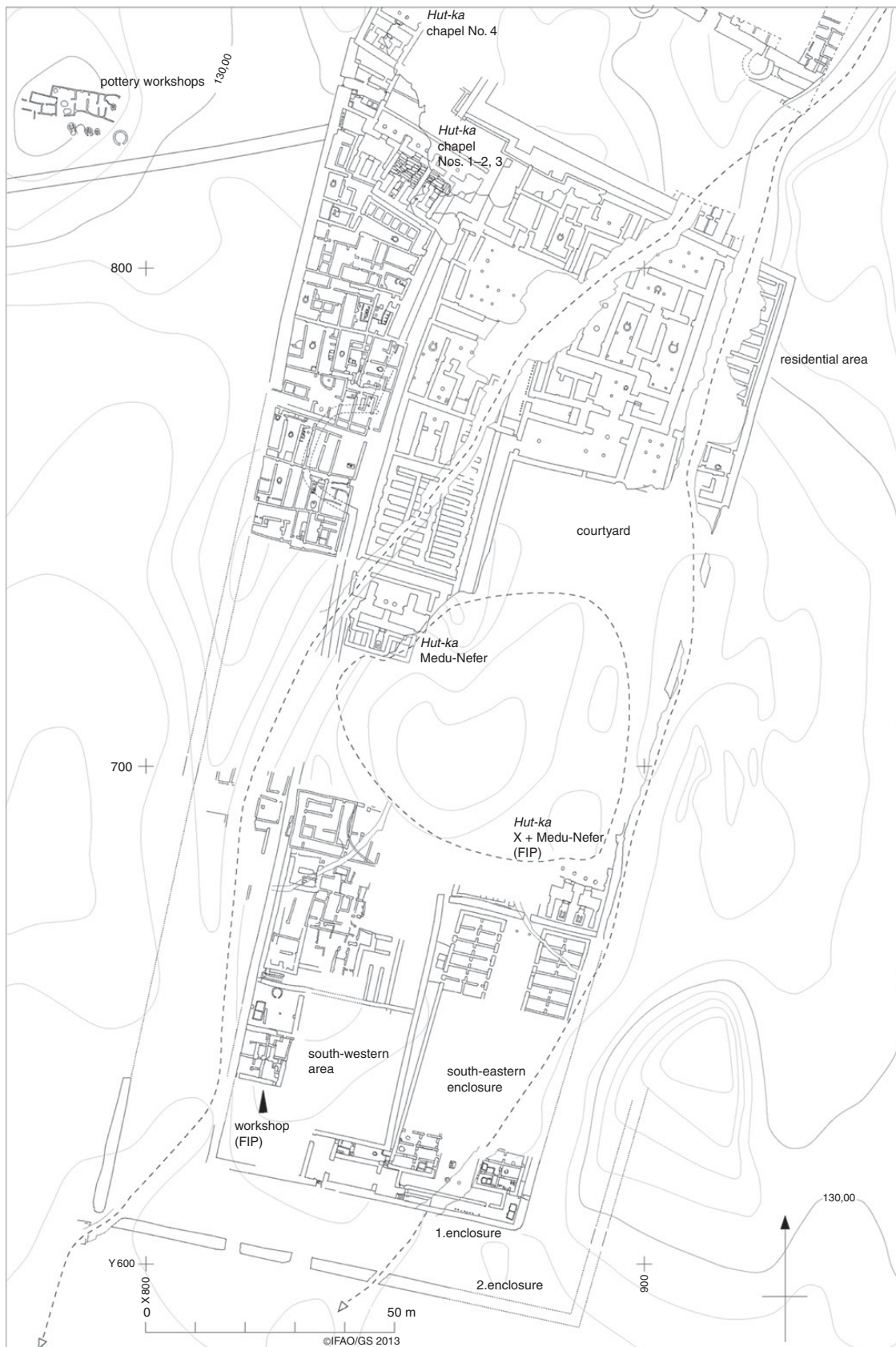
5.41b. View of *ka*-chapels at the governor's palace at Ayn Asil. G. Soukiassian (ed.), *Balat XI. Monuments funéraires du palais et de la nécropole*, *FIFAO* 72, 2013, fig. 22. Photo IFAO, A. Lecler.

building. They seem to have been kept as part of an archival system.²⁶³

South of the western apartment, a large magazine structure built on earlier structures has been excavated. This magazine consisted of two floors of rectangular rooms.²⁶⁴ South of this magazine building, another *ka*-chapel has been excavated that had been dedicated to the cult for governor Medu-Nefer. This chapel seems to have been built sometime after Chapel 3; it was constructed above older mud-brick walls but still belongs to Phase I.²⁶⁵ The central part of the palatial complex is marked by an open court, which by the early Middle Kingdom was flooded, forming a kind of pond and causing the destruction of some of the structures here (Figure 5.42).²⁶⁶

The southern part of the palatial complex provided further evidence for additional elements that belong to Phase I, which predates the conflagration. The layout of

the southern half is characterized by several perimeter walls that divide this area into an eastern and a western parts. The eastern half is marked by an enclosed structure consisting of two rows of about 40 rooms, which are organized in discrete groups according to their entrances (see Figure 5.42: south-eastern enclosure). In the center lies a large rectangular courtyard. The entrance to the south is organized in a way that is reminiscent of important official buildings with several entrance rooms leading via a long corridor to a two columned portico. The precise function of this complex has been difficult to identify because the finds from the related floor levels do not reveal anything specific about the kind of activities that were carried out here. Some of these structures might have been used for food storage and others for accommodation, without having constituted proper houses.²⁶⁷ The oldest phase of occupation of the western half is less



5.42. Plan of the governor's palace at Ayn Asil. After C. Jeuthe, V. Le Provost, G. Soukiassian, "Ayn Asil, palais des gouverneurs du règne de Pépy II. État des recherches sur la partie sud," *BIFAO* 113 (2013), fig. 1.

well preserved beneath several phases of later leveling and rebuilding, but it seems to have been another magazine structure and workshop space.

Three *ka*-chapels (Chapels 1–3) dating to Phase I have been excavated to the west of the palatial apartments and are physically separated from those by a long corridor that also acts as a dividing line between the outbuildings of the chapels further to the south and the core of the palace (see Figure 5.42). A decree issued by Pepi II granting the right to the owner to erect a *ka*-chapel has been found in situ at Chapel 2, while fragments of a second stela of the same nature were excavated in Chapel 3.²⁶⁸ To the south of the three chapels, various kinds of outbuildings organized in distinct parallel rows functioned as storage and food production units linked to the support and upkeep of the cult of governors (Figure 5.43).

The Old Kingdom settlement at Ayn Asil provides new evidence for the Old Kingdom state taking control of the Dakhla Oasis and the important trade route into the Western Desert, called the Abu Ballas trail, which saw much activity during the late Old Kingdom and First Intermediate Period.²⁶⁹ Its residents kept close relations with the central government at Memphis, demonstrating that even though the location was one of the country's more marginal areas (it took about a week of crossing the desert from the Nile Valley to reach the oasis), the state made all efforts necessary to integrate it into the national economic network. Textual sources provide evidence that one of the governors had been educated at the royal court at Memphis and was granted his position as a favor by the king for his services.²⁷⁰ From a cultural perspective, close links to the Nile Valley can also be confirmed by the ceramic evidence and the architectural layout of the individual building units of the palace (see Section 6.4). The overall organization of the larger settlement of which the palatial complex was the main element remains relatively unknown so far because of the lack of fieldwork. The discovery of multiple enclosure and perimeter walls suggests distinct areas of settlement expansions from the original northern enclosure to the large palatial complex in the south, which was enclosed by much simpler and unfortified perimeter walls, which form the interior and exterior enclosures (Figure 5.42). To the west lay a large pottery workshop that functioned during the entire lifetime of the settlement (Figure 5.40).²⁷¹ It also saw several phases of rebuilding and expansion, and it is noteworthy that it was kept along the margins of the town. As far as the full complexity of the Old Kingdom settlement at Ayn

Asil can be deduced from the archaeological evidence, the site can be considered a regional center with urban characteristics. The title “overseer of priests” that was held by the governors of the oasis suggests that there was a temple somewhere close that has not yet been discovered. Also typical for such an urban center is the presence of an elite cemetery in the vicinity of the town, which at Ayn Asil has been located at the nearby site of Qila el-Dabba (Figure 5.44).²⁷² Large mud-brick mastabas of the governors who resided at the settlement of Ayn Asil have been excavated here.

Finally, it is important to emphasize that although limited examples of Old Kingdom settlements are known in the Nile Valley, the site of Ayn Asil is an important additional element that contributes to a better understanding of how these sites were organized and administered. As will be outlined in Chapter 7, there is no evidence for a major decline or abandonment during the First Intermediate Period at Ayn Asil.

5.5.2 The Old Kingdom town at Ayn el-Gazzareen at the Dakhla Oasis

Another example of an Old Kingdom settlement comes from the northwestern part of Dakhla Oasis, close to the modern village of el-Mushia and at about 42 km north of Balat/Ayn Asil (Figure 5.39). The results from geophysical survey work as well as excavations directed by Anthony J. Mills have resulted in the discovery of a larger townsite that covers a total area of about 5 ha.²⁷³ A large mud-brick enclosure wall measuring 125 m by 55 m is one of the main features – already noted during the geophysical work and confirmed by the excavation and cleaning work on site (Figure 5.45).²⁷⁴ The town wall is characterized by two phases. The earlier one was marked by the presence of small rectangular buttresses on the exterior²⁷⁵ and a width of about 1 m. It underwent an addition to the eastern side by another enclosure wall, which was added to enclose an additional stretch of settlement (Figure 5.45).²⁷⁶ The second wall was reinforced by a second mud-brick layer on part of the eastern side and also on the southern and northern sides, which led to a total width of 3.5 m. The second enclosure might be contemporary to Building C, a large mud-brick structure with a symmetrical internal layout that was situated on the northern side of the excavation area and built on top of a stretch of the older town wall (Figure 5.45).

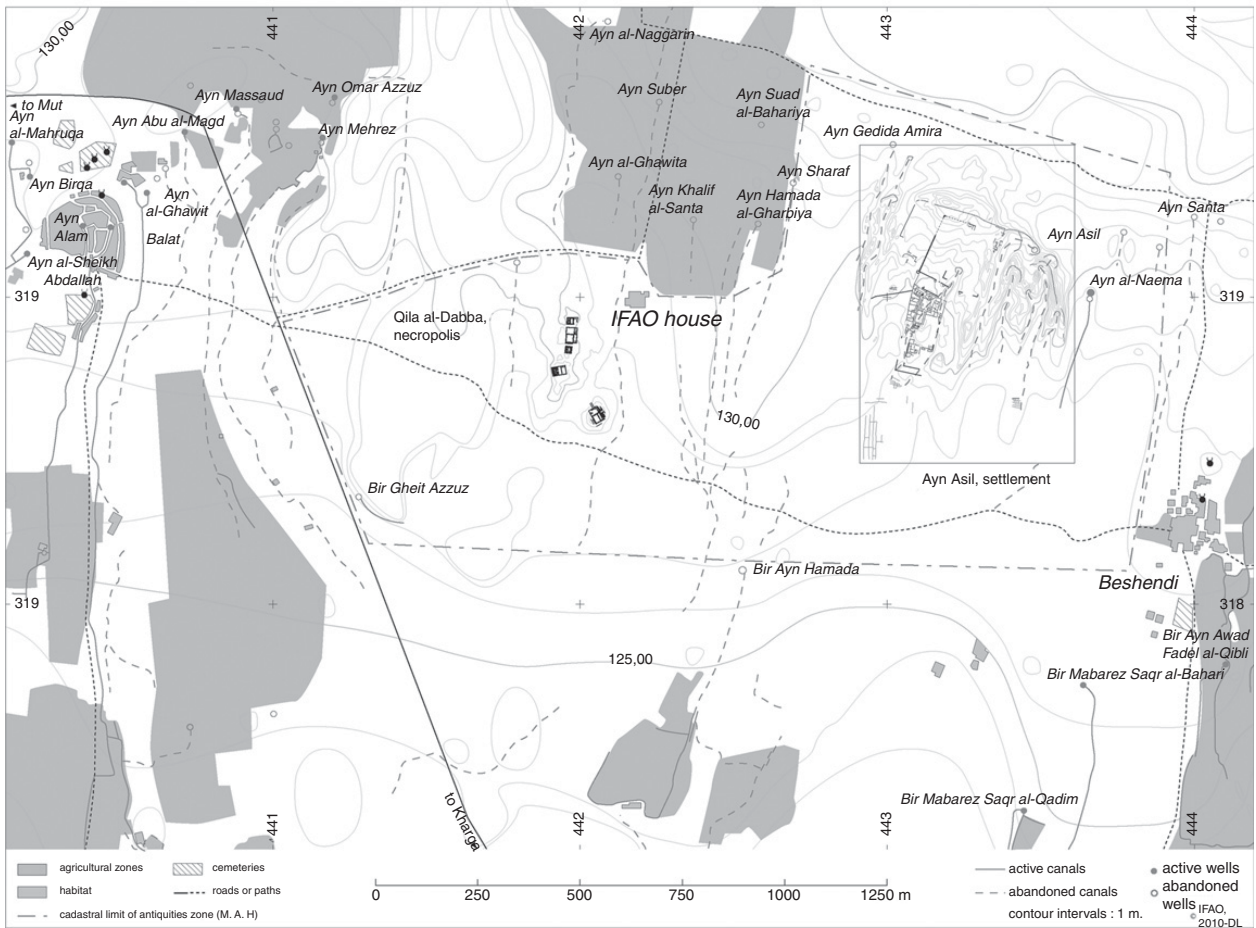
On the interior of the settlement, mainly the eastern half was investigated in detail, including some excavations



5.43. Detailed plan of the outbuildings of the *ka*-chapels, northern part of the governor's palace at Ayn Asil. Courtesy IFAO, G. Soukiassian.

on the interior of the older buttressed enclosure and Building C. The eastern settlement area, between the older buttressed enclosure and the new wall, is occupied by numerous mud-brick structures consisting of smaller rooms and open courtyards, many of which were built

against the interior of the enclosure wall but also abutting the exterior of the older buttressed wall to the western side. It is not possible to identify clear house units, which is due to the fact that the rooms are built in the typical agglutinated fashion. The excavators remarked that the



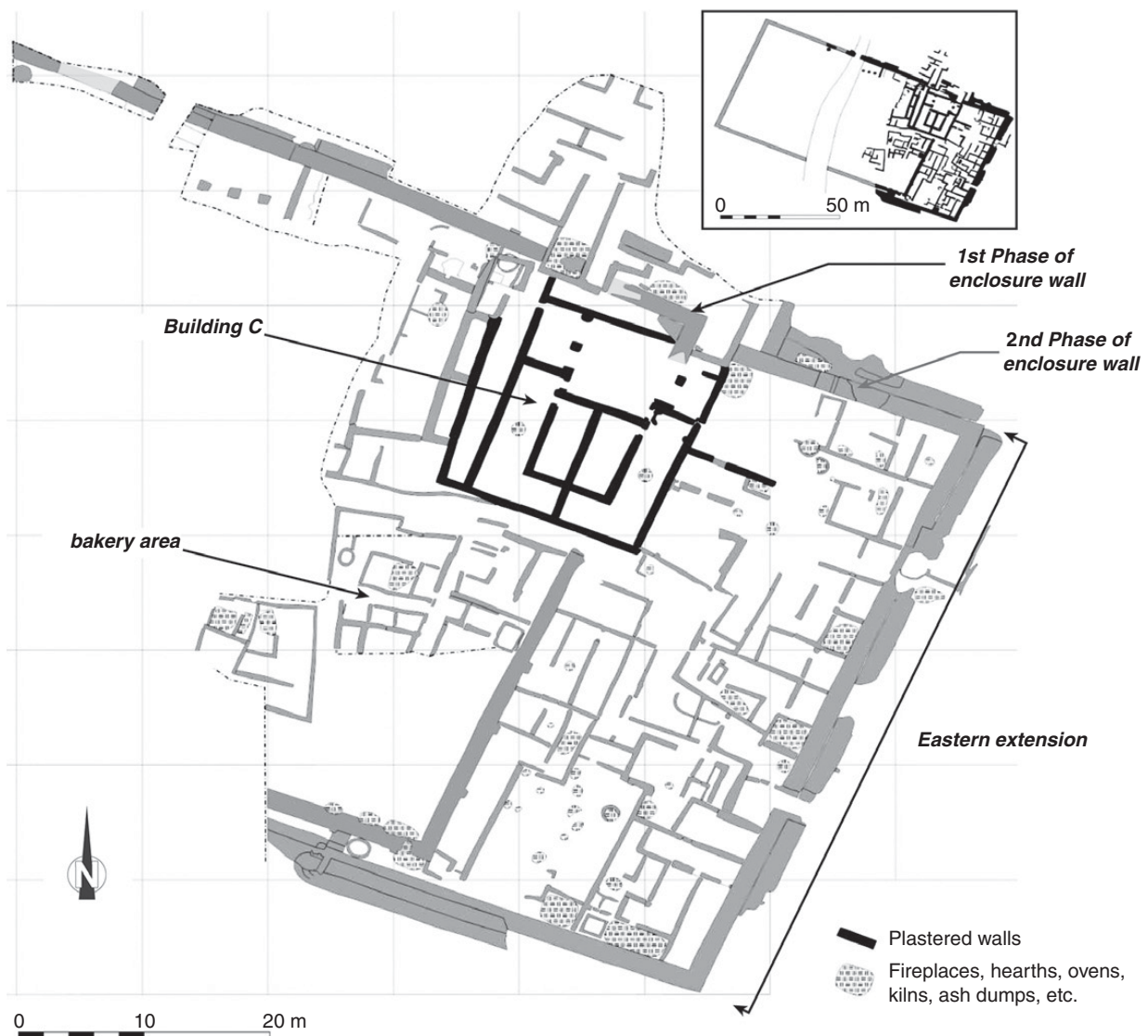
5.44. Plan of Ayn Asil settlement and the Qila el-Dabba necropolis. After D. Laisney, *Balat IX. Cartographie de Balat*, FIFAO 61, 2010, 31, fig. 14.

location of entrances and doorways remains uncertain, making it almost impossible to discern a house or house units among them (Figure 5.45).²⁷⁷ It is also noteworthy that most of the mud-brick walls show the same alignment as the eastern, northern, and southern sections of the enclosure wall. Fireplaces, hearths, and ash deposits were marked on the published plan, and these suggest a domestic function of the mud-brick buildings.

Excavations on the interior of the older buttressed enclosure revealed a larger baking facility characterized by much ash being deposited in various rooms, the presence of large amounts of bread molds, and also numerous clay sealings.²⁷⁸ Evidence for this bakery having functioned on an “industrial” level in contrast to a domestic facility is not only confirmed by its size of more than 200 m² (see Figure 5.45) but also by the seal impressions that were made by typical Old Kingdom stamp and cylinder seals. Many of the bread molds had been stamped

on their exterior, which also has parallels at the settlement of Ayn Asil.²⁷⁹ The archeobotanical analysis of the ash deposits revealed seeds of barley and emmer, with a larger quantity of the former. As far as the chronology is concerned, the bakery structure shows much pottery comparable to that of the Egyptian Nile Valley, which dates to the Fourth and Fifth Dynasty.²⁸⁰ The excavations also revealed that this bakery installation was in use for a considerable amount of time, which can be witnessed by the accumulation of almost 3 m of stratified settlement debris with much ceramic material, providing good evidence for the latest phase of use dating to the late Sixth Dynasty.²⁸¹

The other focus of a more detailed excavation concerns Building C, which can easily be identified as a separate building. The fact that some of its walls were built on top of the eastern segment of the buttressed enclosure wall shows that it belongs to a later phase of



5.45. Plan of Ayn el-Gazzareen. By G. Marouard, using Google Earth™, images ©2014 DigitalGlobe, and after A. J. Mills, O. E. Kaper, "Ain el-Gazzareen: Developments in the Old Kingdom Settlement," in G. E. Bowen, C. A. Hope (eds.), *The Oasis Papers* 3, 2003, 124, fig. 1.

the settlement – probably contemporary to the eastern extension of the site.²⁸² It has a distinct symmetrical layout consisting of a larger rectangular hall fronting two pairs of separate rooms on each side of the building (see Section 6.5 for further details), which exhibit a close resemblance to rooms of the eastern and western apartments of the governor's palace at Ayn Asil (compare Figures 5.45 and 5.42).²⁸³ According to the ceramic evidence, Building C has been dated to the Sixth Dynasty.²⁸⁴ Little evidence for the precise function and use of this building has been found, because the floors were almost empty of any artifacts. Except for its size and layout, the only other hint that it could have had an official function comes from the discovery of one broken clay sealing that carried the impression of a door peg on its back. It had been stamped by a button seal showing a bee.²⁸⁵ According to the relatively close resemblance of Building C to the rooms within the governor's palace at Ayn Asil, it remains a strong possibility that Building C had functioned as administrative and/or residential complex for the official in charge of the town of Ayn el-Gazzareen.²⁸⁶

While only a small part of the whole settlement of Ayn el-Gazzareen has been excavated so far, it is another example of an Old Kingdom settlement of purely Egyptian character that was founded probably by a state initiative in the remote region of the Dakhla Oasis in the Western Desert. The presence of early remains possibly dating as far back as the Fourth/Fifth Dynasty indicate that it might have been founded before the larger town at Ayn Asil.²⁸⁷ And the presence of the large bakery facility could be evidence for the support and provisioning of Old Kingdom expeditions sent into the Western Desert, possibly along the caravan route toward Uweinat or even Kufra Oasis.²⁸⁸ Additional evidence for its role in provisioning expeditions comes from the important quantity of faunal remains – mainly cattle and goat – that has been excavated at Ayn el-Gazzareen.²⁸⁹ In this respect, it is worth mentioning that the geophysical survey at the site has revealed a curved structure surrounding the eastern portion. This construction resembles the cattle corral that has been identified at Heit el-Ghurab. Evidence for kilns and workshop areas that show up as magnetic anomalies on the survey map have been discovered on the exterior of the town wall at Ayn el-Gazzareen, indicating the presence of larger industrial areas here as well.²⁹⁰ Thus, this Old Kingdom settlement functioned as an outpost in the northern part of the Dakhla Oasis, with close connections to the Nile Valley and the Egyptian state. During

the Sixth Dynasty, it was also closely linked to the larger town of Ayn Asil/Balat. Its foundation, which has not yet been explored, is probably an initiative by the central government in Memphis in relation to expeditions into the Western Desert that have been attested already for the Fourth Dynasty.²⁹¹

5.6 CONCLUDING REMARKS

The current archaeological evidence for Old Kingdom settlements is considerably skewed by the evidence for state foundations that are of nonurban character and belong to the category of specialized towns founded by the central government. Until the Sixth Dynasty, it almost seems as if larger urban cities did not exist in the Nile Valley. This perception might be heavily influenced by the problems of settlement preservation within the floodplain and the Delta, where the presence of important towns can be deduced from textual sources and small-scale surveys and excavation, but none of those allow for an in-depth analysis of any kind, which has been the main objective of the current study. Only the southern border town of Elephantine offers more-detailed data. As for some general characteristics, it can be deduced from the available evidence that the late Old Kingdom urban towns in the Nile Valley and the Delta, such as the regional provincial capitals, were enclosed by a town wall, ranged in size from around 3 ha to 5 ha, contained a temple dedicated to the local town god that was the main religious focal point of the local community, and included manufacturing/production areas that in some cases were located on the margins of the town. There is no evidence for any monumental public buildings or distinct places where economic transactions would have taken place, such as a central marketplace or *suq*, which would have been recognizable elements within these towns. As can be seen clearly at Elephantine but seems to be typical for all types of settlements during the Old Kingdom with almost no exceptions, the layout and organization of the various settlement quarters follows an agglutinated form with almost no clearly identifiable, separate houses but rather an almost labyrinth-like sequence of rooms and courtyards difficult to divide into specific units. The only buildings within a settlement that stand out from the general fabric of the towns are the sanctuaries, although even those are not always easily recognizable in settlements of the third millennium BCE, as there is no formal architectural model that the provincial

sanctuaries adhered to, which stands in great contrast to the layout of royal mortuary temples in the Memphite region.²⁹²

Another characteristic of the earlier Old Kingdom towns before the Sixth Dynasty is that there is little evidence for any formal street network with main and side streets leading through the settlement. Instead, it is possible to recognize smaller alleys and pathways that often end in a cul-de-sac. There is no evidence that these pathways and alleys were considered public property, and they seem to have been randomly used, opened and closed by the inhabitants. Such an informal system can be found at the settlement of Heit el-Ghurab at Giza – specifically in the Eastern Town but also in the Western Town, although in the latter some larger streets can be recognized in comparison with the former (see Figure 5.11). Very similar is the layout at Elephantine, where it is equally difficult to distinguish the different access ways and paths/alleys within the settlement without any organized streets during the first half of the Old Kingdom but changes during the Sixth Dynasty. As can be seen from the settlement at Heit el-Ghurab at Giza, larger streets organized in an orthogonal way existed when it was necessary to control access to and from buildings. In that respect, the Gallery Complex and the Royal Administrative Building can be considered installations that are closest to what designates an “official” settlement quarter. The layout of this part of the town indicates a “high degree of social control within and between the distinct components of the Heit el-Ghurab settlement.”²⁹³

The communal aspect of life seems to have been dominant for these communities and resembles to some extent what Eugen Wirth has recognized as the “private sphere” in oriental cities.²⁹⁴ He points out that there was no public space in such towns when the private initiative was the driving force in town planning. This often led to a certain degree of exclusivity and restricted access to parts of the settlement that were entirely dependent on the initiatives and decisions taken by the inhabitants, instead of an official institution, for their development.²⁹⁵ Wirth considers this phenomenon an indication of privacy (Privatheit) as a major characteristic for oriental towns and cities, and this also seems to correspond quite well to Egyptian settlements of the third millennium BCE.

The general importance of the community can even be witnessed even at the preplanned, orthogonally laid-out town at Khentkawes, Giza, where although house units can be clearly distinguished from the plan, the doorways

connecting each unit are evidence for a large degree of intermingling among a community sharing facilities and having easy access to one another.²⁹⁶

For the Old Kingdom, there is no private-public dichotomy recognizable either on the level of individual houses or within the wider settlement. Again, Elephantine is probably the best example to demonstrate this further. For the Early Dynastic and early Old Kingdom, administrative activity, economic transactions, and close links to the central government in Memphis can be deduced from the large number of sealings that have been found during the excavation. They were located in all parts of the settlement and do not permit the identification of any specific distribution in certain areas or buildings within the town that can be specifically identified as solely “official” or “administrative” and would fall under the category of “public” structures. It is evident that there was no specific architecture distinguishing between official/administrative and private buildings; administrative activities were carried out in the same buildings that were used as residences. This again shows the general organization of the settlement being much dictated by the community itself, with a complete lack of buildings of “public character” imposed by a higher authority.

Toward the end of the Old Kingdom, there seems to be a slight increase in the hierarchy of buildings as well as the first appearance of a street network noted within the settlement but not leading to any profound changes in the general fabric of the town. During the Sixth Dynasty, both at Elephantine and in the Dakhla Oasis at the settlement of Balat/Ayn Asil, larger elite residences appear that stand out in size and complexity from the remainder of the settlement.

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The Layout of Old Kingdom Houses

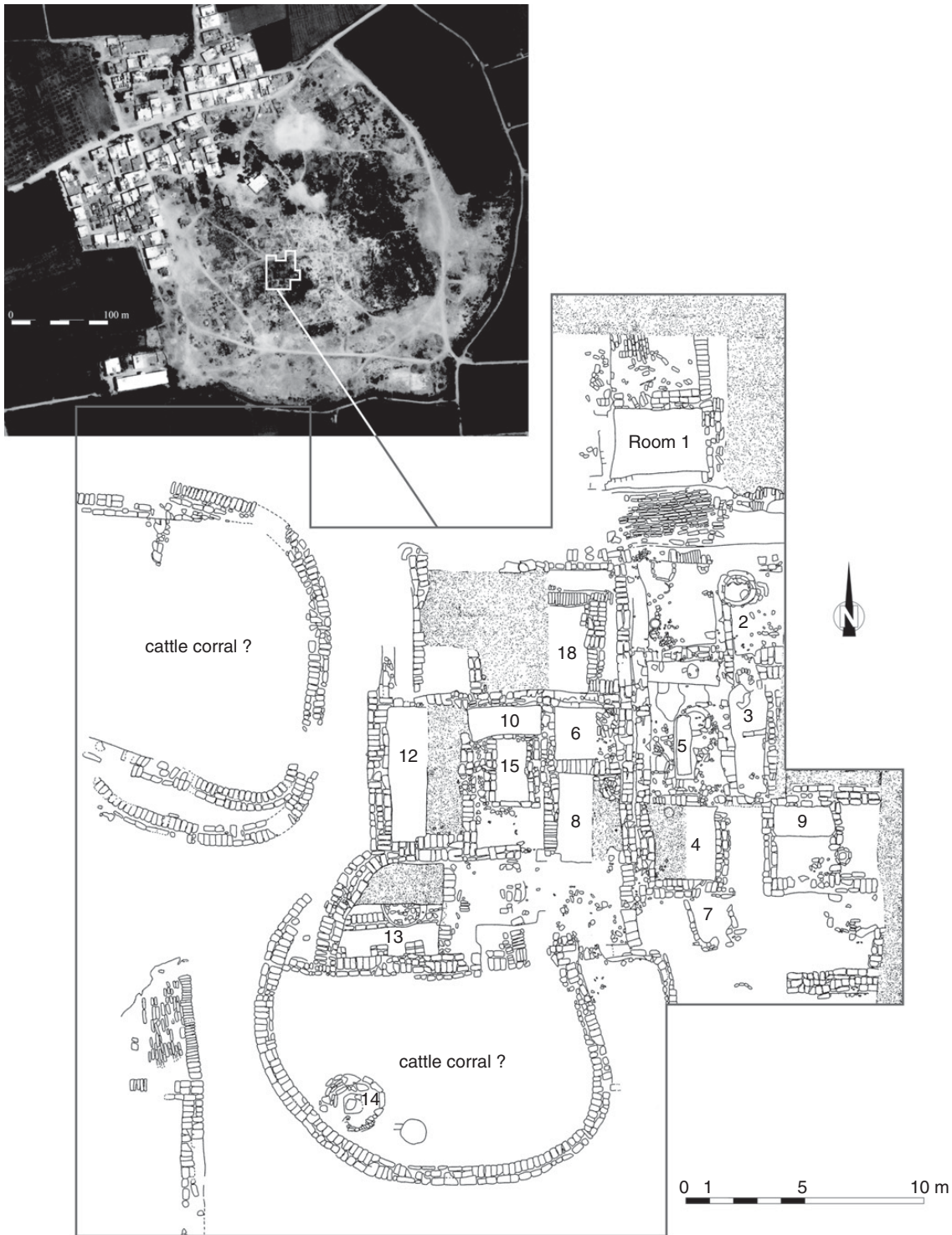
6.1 INTRODUCTION

Any attempt to analyze the mud-brick houses and buildings excavated at Old Kingdom settlement sites and establish a typology for recurrent layouts is difficult because few sites with adequately published data are available. It is important to emphasize that the current analysis is only using examples that come from settlement contexts and those that have been securely dated to the Old Kingdom. The following case studies concern mainly domestic buildings, although a solely domestic use for some of the rooms within larger buildings cannot always be guaranteed, as there is evidence for a certain degree of multifunctionality and “hybrid households,” including evidence for administrative activity. This is especially evident concerning the palatial complex excavated at Ayn Asil/Balat in the Dakhla Oasis, which combines several different functions, including administrative and official use. Because there is only a limited number of reliable examples of Old Kingdom houses available – the full spectrum includes elite residences and palatial complexes on one end and simpler domestic buildings on the other – it is necessary to maintain a certain flexibility for some of the internal details of these structures, which can be more or less elaborate and of varying sizes according to the rank of the inhabitants. “Domestic” is understood in this context as any habitation site people lived at on a permanent basis and considered “home.” As can be seen in some cases, this does not exclude the presence of attached food production areas and manufacturing installations or other structures where a variety of administrative activities might have been carried out. In the examples presented in this chapter, it will be demonstrated that in a building used as a residence, private rooms can often be distinguished by floor assemblages

and domestic installations from rooms that served multiple purposes, including administrative tasks.

Nevertheless, those sites that are currently providing the necessary information in relation to this topic remain relatively few in number. The site of Heit el-Ghurab and the Khentkawes town, both located at Giza, are well studied and have been recently excavated. Therefore they provide a good starting point for the analysis of house types and functions. From the regions of the Nile Valley, only the site of Elephantine has enough data to be included here. The ancient settlement at Kôm el-Hisn in the Delta, for example, shows few building remains. Those are characterized by being connected to large, oval, open courtyards that have been interpreted as cattle corrals. The internal layout of the individual house units is difficult to analyze because of later installations and a certain degree of reuse, which frequently prohibits distinguishing the exact limits of the rooms and their access patterns ([Figure 6.1](#)).¹ More data relating to the internal layout of buildings has been obtained from the late Old Kingdom town and palace complex at Ayn Asil in the Dakhla Oasis, which compares very well with settlement structures in the Nile Valley. A second settlement site in the Dakhla Oasis situated at Ain el-Gazareen shows very similar structures too. These sites provide a first data set that can be used as a starting point for establishing a typology of Old Kingdom house layouts and contributing to a better understanding of urban life during the third millennium BCE.

Whereas typologies of domestic buildings have been established for the Middle and New Kingdoms (see [Section 9.1.1](#)), the Old Kingdom has so far not been the object of any such study. With the increasing amount of settlement data from this period becoming available in



6.1. Plan of the Old Kingdom settlement remains, Area A at Kôm el-Hisn. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after A. Cagle, *The Spatial Structure of Kom el-Hisn: An Old Kingdom Town in the Western Nile Delta, Egypt*, BAR International Series 1099, 2003, 251.

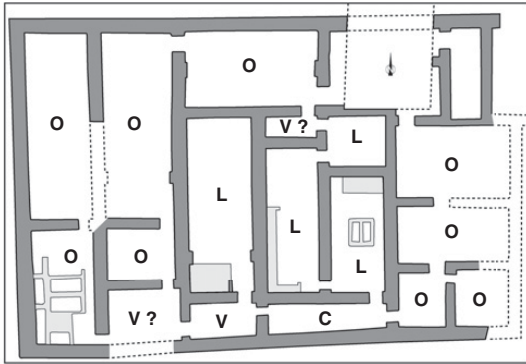
publications, it is now possible to make a first attempt at a typology. In order to fully analyze a building with regard to its layout and internal organization, it is useful to have not only the architectural plan but also some information as to finds and installations within the various rooms, such as fireplaces, bed platforms, niches, and storage facilities – and ideally floor assemblages indicating certain activity areas. The various examples that will be presented in more depth within this chapter offer a first glimpse at the existence of distinctive patterns within the layout of domestic buildings dating to the Old Kingdom. They can be recognized on an interregional as well as a diachronic level, with slight variations on the same scheme relating to the size and rank of each building (elite/palatial versus simpler houses of lower levels of society). As is even more evident during the Middle Kingdom and later, a certain basic organization of rooms can be found regardless of complexity and size in buildings that show evidence for residential use. Regional differences do not seem to have mattered much for the Old Kingdom – although this might be more a reflection of the incomplete nature of the evidence – whereas there might be some evidence for differences in house types between Upper and Lower Egypt during the Middle Kingdom.²

Old Kingdom houses typically consist of a distinct core unit, usually located in the center of the building, that comprises between three to six rooms depending on the size and complexity of the whole building (Figure 6.2a). The entrance from the street level opened into a separate vestibule (V), which is the space from which various doorways can be seen giving access to different parts of the house. The key feature present in most cases is a long corridor (C), which usually lies behind the vestibule (V) and leads toward the interior core of the building. In several cases it was possible to observe that pottery vessels were stored along the sides of this corridor, suggesting that this space was used for temporary storage. Also important to note is that the corridor usually extends along most of the length of the core unit and turns at a right angle toward the inner rooms at the end of it. One of the principal elements of the core rooms is a rectangular room (L)³ that frequently shows proportions of 1:3 and in some cases is subdivided toward its rear by two protruding half pillars that give this part of the room a niched appearance (Figure 6.2a: House Unit 1, Heit el-Ghurab; House E, Khentkawes town; House at Elephantine). While there is some evidence that this niche could have been used for sleeping – as has been deduced from the presence of the

occasional bed platform here, especially at houses in the Memphite region – it is unlikely that its use was restricted to the “bedroom” function. More likely, it was used for sleeping and other daily life activities.⁴ Additional elements of the core unit are L-shaped rooms, sometimes following a symmetrical arrangement on each side of the central rectangular room. Those functioned in the same way as the rectangular room with the half pillars and probably comprise an alternative layout to the latter (see Figure 6.2a: House E, Khentkawes town; Figure 6.2b: all examples). Kitchens (K) were usually confined to the more marginal areas of the building, except in smaller houses such as Building E at the Khentkawes town, where evidence for food preparation and cooking was found in one of the L-shaped rooms next to the rectangular room with the niche (see Figure 6.4). Therefore, these additional rooms of the core unit seem to have served multiple purposes, from food preparation and eating – as can be witnessed by the occasional ceramic evidence found in these rooms – to a general living room used by the inhabitants on a daily basis. There is evidence for benches in some of the core rooms of the larger elite houses, suggesting that they functioned as seating areas for the inhabitants. House Unit 1 at Heit el-Ghurab certainly has some rooms where administrative activities were carried out, deduced from the large dump of discarded sealing fragments on the exterior of the building. But it is difficult to assign this kind of activity to a specific space within the house because the architecture does not provide any indications for rooms used for administrative purposes. However, at the much larger palatial complex at Balat, evidence for administrative activities was found especially near important doorways and within the columned halls or peristyle courts (Figure 6.2b). The exceptional conditions of preservation encountered at Balat, due to a large fire that destroyed these parts of the palace, allows for a better understanding of the use of the rooms because many objects were left there and the place was not reoccupied in most of these areas. Private living rooms at Balat can also be recognized not only from their position within the central part of the complex but also by the presence of carefully built horse-shoe-shaped hearths in the center of these rooms (Figures 6.9 and 6.10).

Various further elements exist around the actual core of an Old Kingdom house, such as open courtyards, storage installations, magazines, and manufacturing/production areas (O)⁵ (see Figure 6.2a). Again, the complexity and

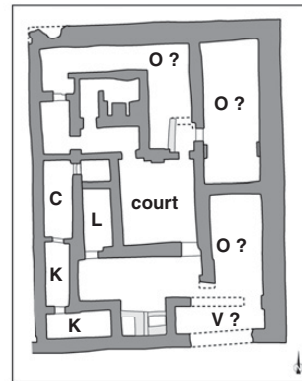
Plan of House Unit I (4th Dynasty)
Western Town of Heit el-Ghurab at Giza



Plane of House E (late 4th to 6th Dynasty)
Khentkawes town at Giza



Plan of House Unit 3 (4th Dynasty)
Western Town of Heit el-Ghurab at Giza

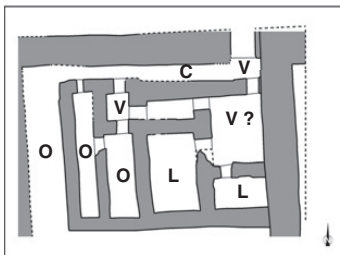


Eastern Town House (4th Dynasty)
Eastern Town of Heit el-Ghurab at Giza

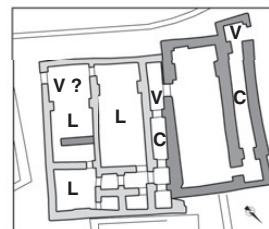


- V = vestibule
- K = kitchen
- H = hall
- L = living room
- C = corridor
- O = open courtyard, storage installations, manufacturing and production area

North Street Gate House (4th Dynasty)
Gallery II complex at Heit el-Ghurab at Giza



House of the Old Kingdom settlement (early 3rd Dynasty)
South of the former fortress gate at Elephantine



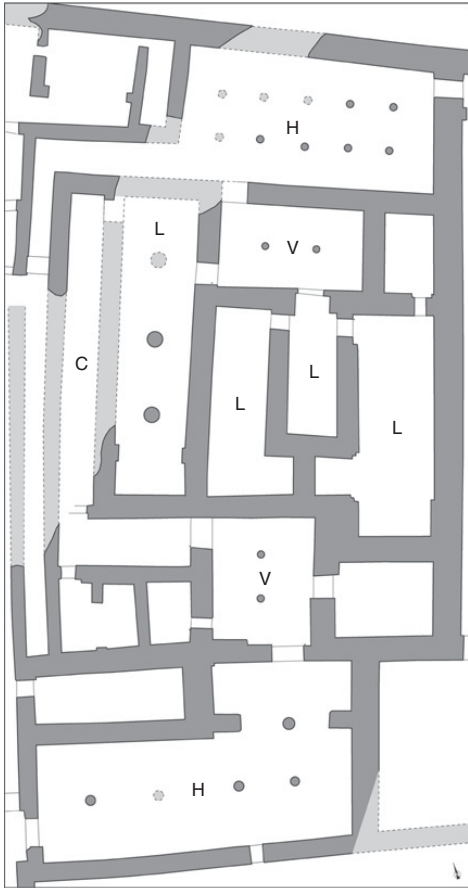
0 5 10 m

6.2a. Examples of Old Kingdom house layouts. Drawings by G. Marouard.

the number of such installations depend on the overall size of the building as well as the occupation of the inhabitants. At Elephantine, for example, there is evidence for larger courtyards with silos as well as areas for stone working on the outside of the actual main building,

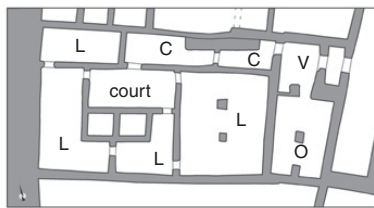
but these are clearly intimately connected to it because they were built in close proximity to the core unit (Figures 5.35–5.37). The following sections provide further details for a selection of houses from different settlements in the Nile Valley and the Dakhla Oasis.

Eastern Apartments of the Governor's palace at Ayn Asil (6th Dynasty)

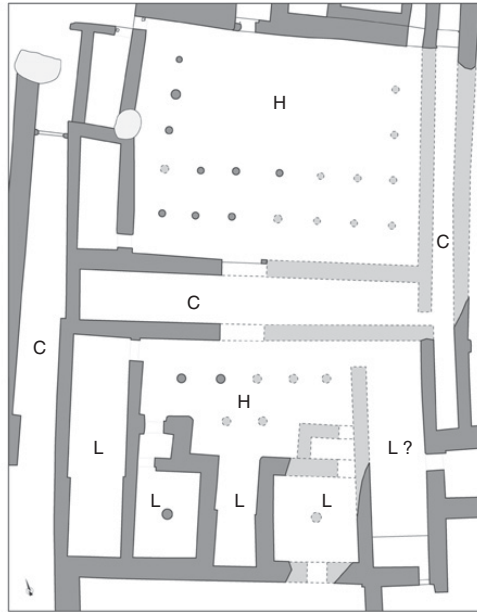


0 5 10 m

Building of the 3rd row of the outbuildings at Ayn Asil (6th Dynasty)

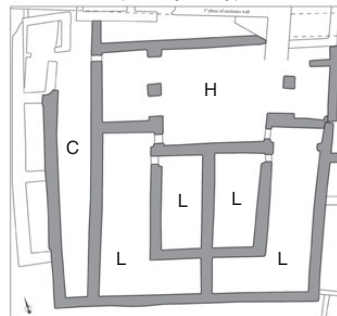


Plan of the Western Apartments of the Governor's palace at Ayn Asil (6th Dynasty)



- V = vestibule
- H = hall
- L = living room
- C = corridor
- O = open courtyard, storage installations, manufacturing and production area

Building C at Ayn el-Gazzareen (6th Dynasty)



6.2b. Layouts of buildings in the Dakhla Oasis, late Old Kingdom. Drawings by G. Marouard.

6.2 EVIDENCE FROM GIZA

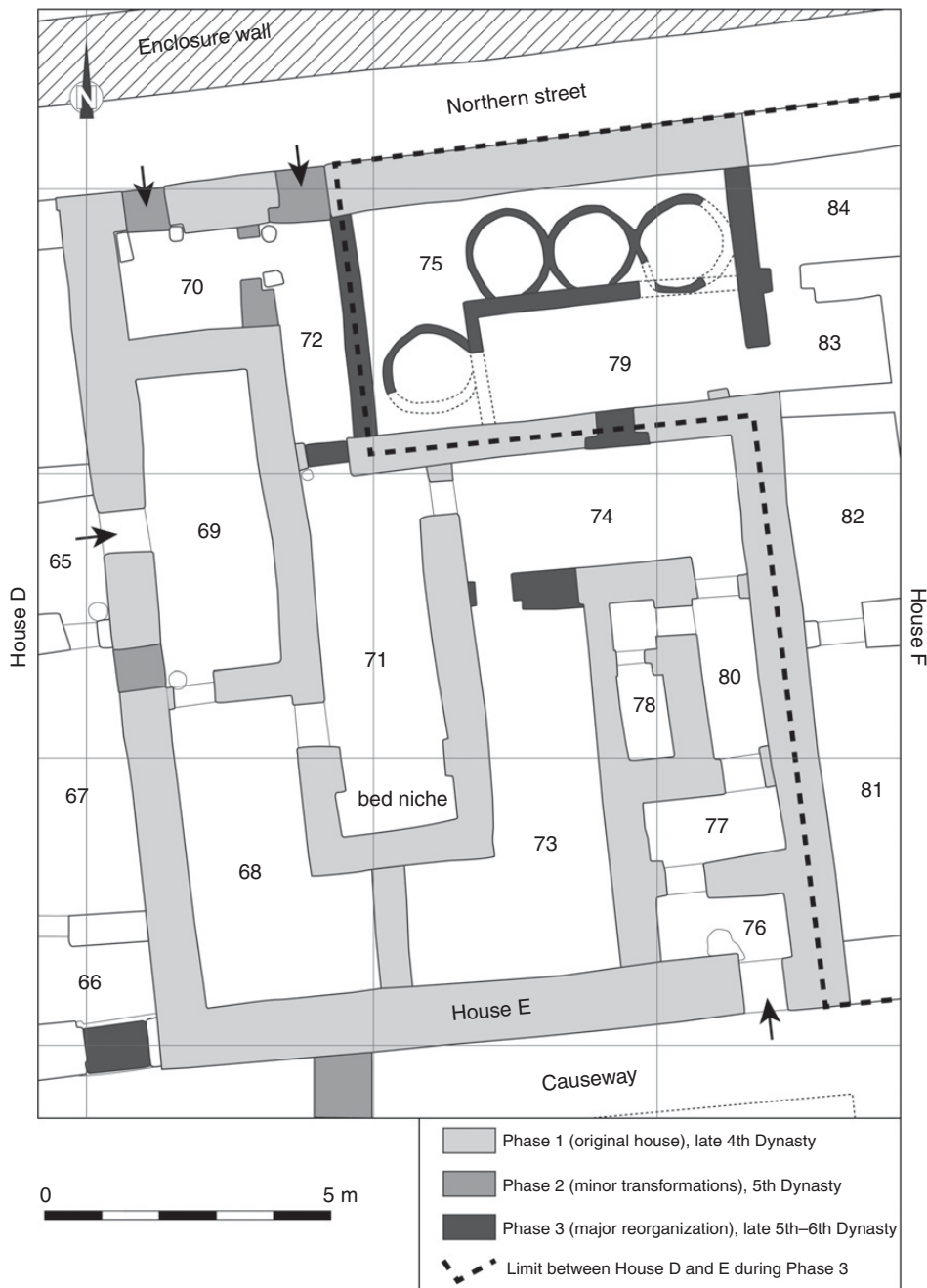
For a variety of buildings that have been excavated at Giza, it has been possible to identify a core unit occupying the center of each domestic building. The most dominant feature here is a larger rectangular room that frequently shows proportions of 1:3. This room usually occupies the most central position within the house and

is then surrounded by slightly smaller rooms, sometimes in L-shaped form, sometimes also rectangular and of proportions similar to those of the main room. Several good examples of houses dating from the Fourth Dynasty have been excavated at the Khentkawes town (Buildings E and K) and four houses in different parts of Heit el-Ghurab.

6.2.1 Building E of the Khentkawes town

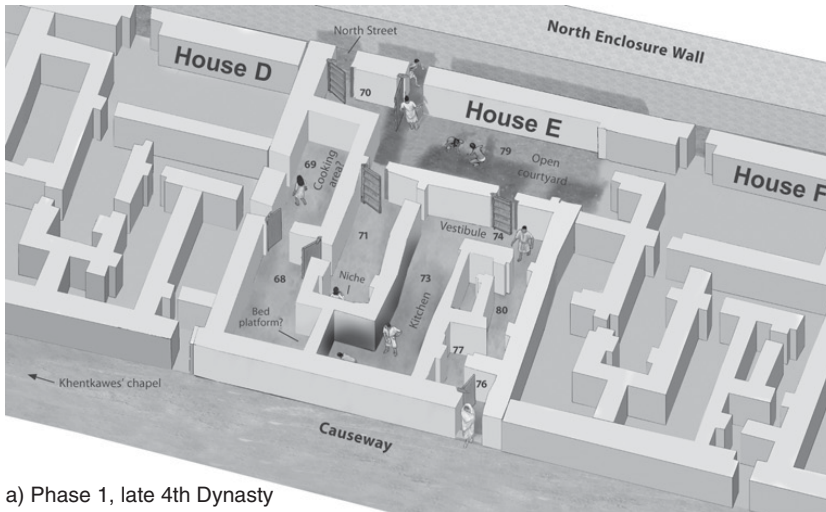
One of the houses, Building E, was chosen for reexcavation by Mark Lehner's team because of its relatively good state of preservation.⁶ The newly recovered pottery assemblage from Building E consists of a sizeable corpus of diagnostic sherds that date mainly to the cultural horizon

of late Fourth to early Fifth Dynasty.⁷ Its layout clearly belongs to the category of the typical Old Kingdom house described previously (Figure 6.3 and 6.4a). From the causeway leading up to Khentkawes' tomb, a door gave access first into a small vestibule (76) and then into a second, almost-identical small room (77), which seems to have

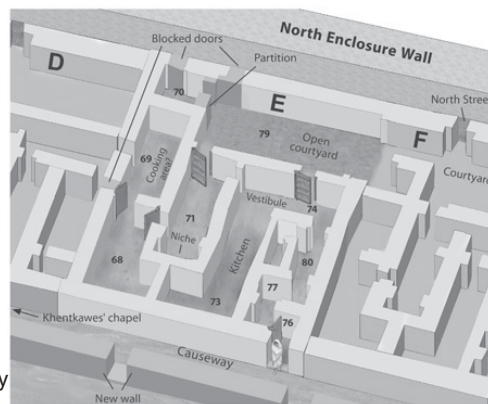


6.3. Plan of House E at the Khentkawes town at Giza, (Phases 1–3, late 4th to 6th Dynasty). By G. Marouard, after A. Tavares, “Bringing an Ancient House Back to Life,” *AERAGRAM* 12.1 (2011), 16.

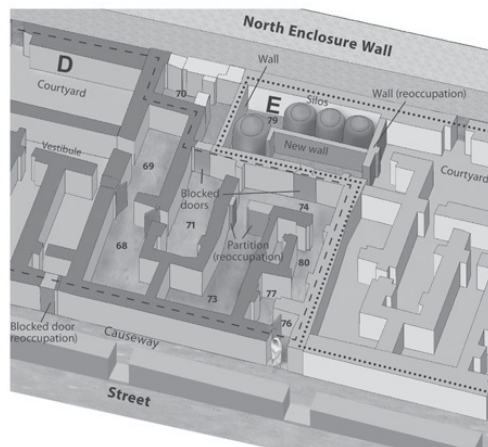
THE LAYOUT OF OLD KINGDOM HOUSES



a) Phase 1, late 4th Dynasty



b) Phase 2, 5th Dynasty



c) late 5th–6th Dynasty

6.4. Reconstruction of the major occupation phases of House E at the Khentkawes town at Giza. After A. Tavares, L. Yeomans, “A House through Time, Abandonment, and Intermingling,” *AERAGRAM* 10.2 (2009), 11–13. © AERA, prepared by W. Wetterstrom.

been used for storing water jars. It opens into a narrow corridor (80) that leads to room 74, which is the first larger space that was encountered upon entering the building.

North of room 74 lies an open courtyard that also had a doorway leading into the inner core rooms. Building E is characterized by a central room (71) of rectangular layout

measuring 6 m by 2 m and flanked by two L-shaped rooms (73 and 68) (Figure 6.3). It has the typical niche created by two protruding half pillars at its southern end and was only accessible through two doorways from the adjacent living rooms (74 and 68).

Various functions have been assigned to these rooms previously, such as kitchen, living and reception room, and private bedrooms.⁸ These identifications are highly problematic in view of the archaeological evidence and leave the reader with the impression that a certain amount of Western preconceptions in terms of what a house should contain can be found here. It is important to distance oneself from the idea of these houses being made exclusively for priests, because their layouts closely resemble buildings of domestic character that are typical for the Old Kingdom and can be found in similar form at other sites too. They incorporate the various elements that are expected for cooking, storage, and sleeping. Among the finds there is no evidence for any official or administrative function such as discarded sealings.⁹

As Lehner's team was able to demonstrate by referring exclusively to the archaeological data and related material, the identification of the central room (71) as a reception room does not hold.¹⁰ On the contrary, three of the largest rooms (69, 68, and 71) forming the inner core of Building E show evidence for multiple activities having taken place – such as sleeping and food preparation. The southern niche of the central room was most likely used for sleeping and cannot be considered to have functioned as a reception room. One of the L-shaped rooms (73) had already been identified by Selim Hassan as the kitchen due to his observation that its walls were blackened from cooking activities. The second L-shaped room (68) could have profited from the warmth generated by the kitchen, especially next to its eastern wall, which is shared by the two spaces.

The layout of the entrance area, with the corridor (80) and the small vestibules (76 and 77) directly entered from the causeway, certainly prohibited a direct view into the interior of the house, but it might have had a purely structural function (Figure 6.3). Lehner commented on the relative thickness of the exterior walls of the building, which range between 0.85 m and 1.10 m.¹¹ Such a thickness is capable of supporting a second floor above the ground level even though no concrete evidence for such an upper level has been found so far. The small rectangular room (78) next to the entrance corridor (80) does resemble the foundation of a staircase construction, but the complete lack of any evidence for stairs makes this

questionable.¹² Another tentative identification is room 77 as a washing/cleaning space, where in two instances water jars were recorded by Hassan during the initial excavation.¹³ It is currently not possible to securely evaluate whether this would have been a feature typical for a house linked to the royal mortuary complex or whether this was common at other kinds of Old Kingdom settlements too.

Also noteworthy is a close look at the evolution of the main access points into Building E. Its original layout was characterized by five doorways into the interior of the house: two gave access to the northern street; two were linked to the adjacent house on its western side, Building D; and one on the southeast corner provided an entry from the causeway (Figure 6.4a).¹⁴ In a first phase of alterations, which dates to the Fifth Dynasty, three of the five doors were bricked up using the same size mud-brick modules employed for the building walls (Figure 6.4b). This could suggest that it did not happen long after the initial construction stage was finished and might indicate the (re)use of available bricks from the original construction. Such bricks were used to close one of the two doorways giving access to the neighboring Building D and the two doors leading into the northern street. Therefore, these closures especially concern the access from the northern street into room 70, where additional walls were built during the third phase of alterations so that eventually it was separated from the adjacent open court (75/79) but kept an open corridor (72), which led toward the central room (71) (Figures 6.3 and 6.4c).

In the final phase of the occupation of House E, the northwestern corner (rooms 70 and 72) was completely cut off from the rest of the building, and four round silos were built inside the courtyard (75/79) (Figures 6.3 and 6.4c).¹⁵ However, the main access to the court was then only provided from the neighboring Building F, which makes one wonder whether the silos were in fact used only by the neighbors and no longer by the inhabitants of Building E. The silos, enclosed by an L-shaped mud-brick wall that was constructed at the same time, seem to have been used to contain a deposit of ash, which filled the gaps between the silos and the wall.¹⁶ Several wall repairs were also noted for this phase of occupation, in addition to new wall elements that were specifically built in the southeastern corner (Figure 6.4c).¹⁷ These elements are mainly repairs and rebuilds of the older walls and set apart from the addition of the L-shaped screen wall at the silo court, which shows that the overall

internal layout of Building E remained roughly the same. In comparison, the walls of Building K, situated farther to the south of the town, witnessed a very similar sequence of rebuilds.¹⁸ This third phase of Building K dates to the late Fifth to Sixth Dynasty and represents the last phase of occupation after a short period of abandonment (see [next section](#)).

The various pottery forms found in Building E underline the domestic function of this house, because many vessels for food preparation and consumption were identified within this assemblage.¹⁹ Astonishingly, there seems to be a complete lack of the typical types of votive pottery – such as the ubiquitous miniature vessels – usually associated with the mortuary cult. Those have been found in other areas of the site – for example, east of the main settlement at the terraced area KKT-E that slopes down to the basin.²⁰

6.2.2 Building K of the Khentkawes town

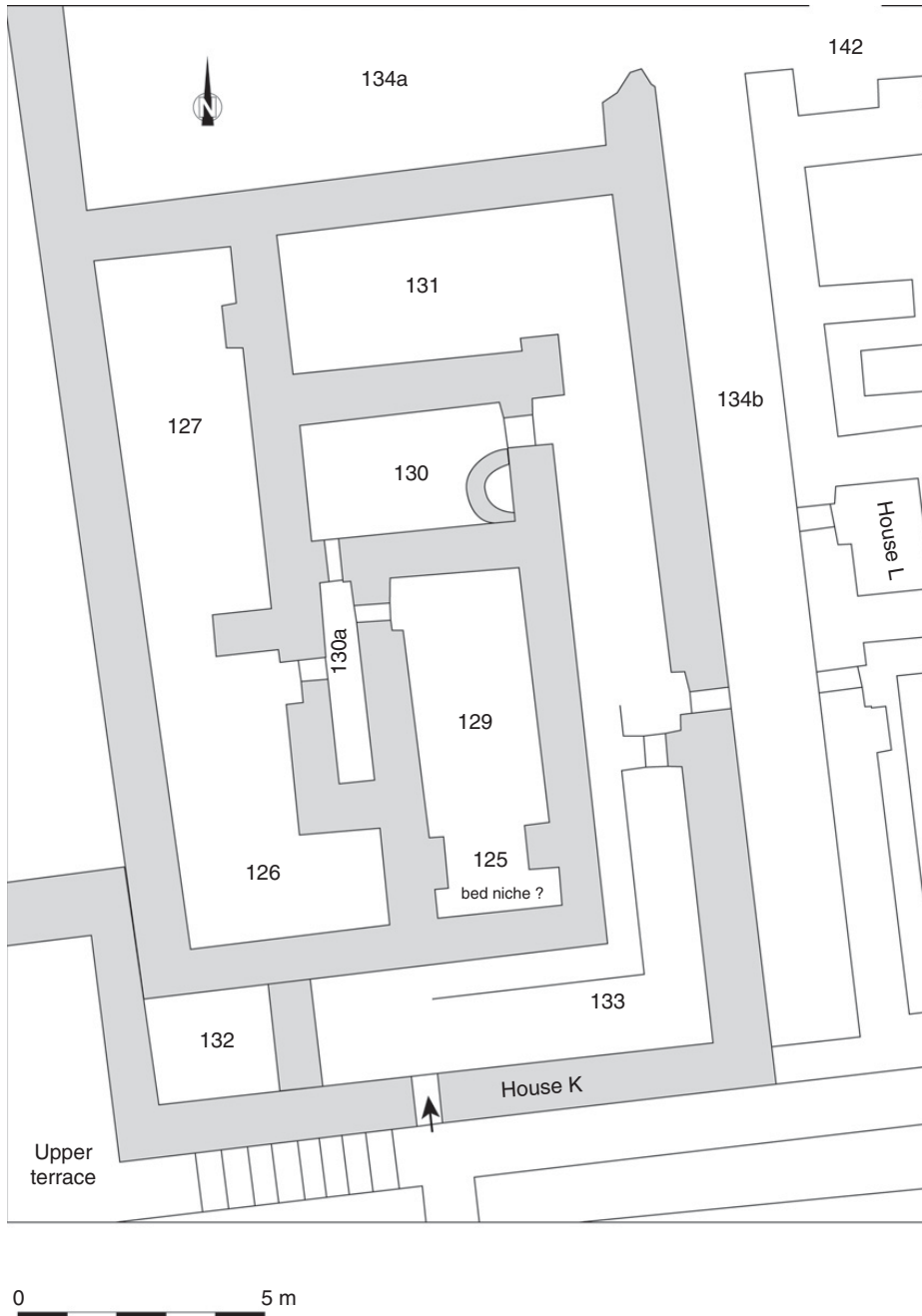
A layout comparable to that of Building E can be recognized in Building K, which lies in the part of the town that has been considered to be of administrative character.²¹ A similar core unit consisting of rooms 125–126, 129, and 130 can also be seen, and it shows much resemblance to the layout of Building E further north ([Figure 6.5](#)). Its total size covers 137 m², making it a medium-sized building at the site.²² The main room in the center of Building K (129) measures about 7.4 m by 2.6 m and is also equipped with the typical niche construction at its southern end.²³ Another larger room is situated to its northern side (127), and an L-shaped one (126) lies to the western side. In terms of accessibility, room 129 was the least accessible space and necessitated traversing a long corridor (133), the oven room (130, probably the kitchen) and a small vestibule (130a) ([Figure 6.5](#)). It seems that the core unit of Building K was surrounded by long corridors and large rooms such as room 131 on the northern side of the building, measuring 7 m by 3 m ([Figure 6.5](#)). A communal corridor (134 b) existed between Building K and the neighboring Building L and had doorways leading into each of the houses. This corridor also led to a large open courtyard (134 a) directly to the north of Building K, but whether it should be considered an integral part of it or functioned more like a communal court used by the inhabitants of several houses in this area is difficult to assess. North of Building L lay a similar open courtyard (142) that was directly accessible from it ([Figure 6.5](#)), suggesting that 134a had indeed once belonged to Building K. The relatively bad preservation of this building does not permit any

further information on the specific use of the various elements, nor does it provide any indications about possible administrative activities.²⁴

6.2.3 Heit el-Ghurab – the North Street Gate House

A smaller building of domestic character is the North Street Gate House, which belongs to the town of Heit el-Ghurab. It was constructed of fieldstones and is another good example of a typical Old Kingdom layout.²⁵ It was built against the west wall of Gallery Set II and was accessible from the North Street (see [Figure 5.11](#)). It covers about 120 m² and consists of several rooms and corridors built around a core unit formed by rooms 6 and 7 ([Figure 6.6](#)). The entrance from the street led to a small vestibule (1) that gave access to a long corridor (Room 3) to the west and another vestibule (Vestibule 2) to the southern side. From the latter, the inner core of the building was accessible. The central room (6) measures only 3.1 m by 2.2 m and shows much evidence for bread-baking activity.²⁶ It has neither the usual rectangular layout and proportions commonly noted for the central rooms (see [previous section](#)) nor the niched subdivision with the protruding half pillars toward the back. It seems that Room 7 next to it was used for sleeping, because a slightly elevated floor level has been noted here. This room was also entered through Vestibule 2. The western side of the North Street Gate House was accessible through the long corridor (3) leading to a third small vestibule (Vestibule 3) in turn leading into Room 5, which has been interpreted as the principal living room ([Figure 6.6](#)). This latter room has the typical rectangular proportions and measures 4 m by 1.5 m. A doorway on its western side led into a long narrow room (2) that had probably functioned as a magazine according to the numerous storage jars and bread molds found there.²⁷ Additional evidence for the storage of bread molds and other pottery vessels comes from the entrance corridor (3), where these items had been stacked against the northern wall.²⁸

The excavations of the North Street Gate House revealed a domestic building of medium size that was probably inhabited on a more permanent basis than the neighboring galleries. For example, the inhabitants were clearly preparing their own food and taking care of their own storage facilities. It is quite likely that a complete family inhabited this building, which stands in contrast to the type of inhabitants that occupied the galleries. The location of the North Street Gate House is striking and suggests that its inhabitants played some role in connection with the gallery complex nearby.

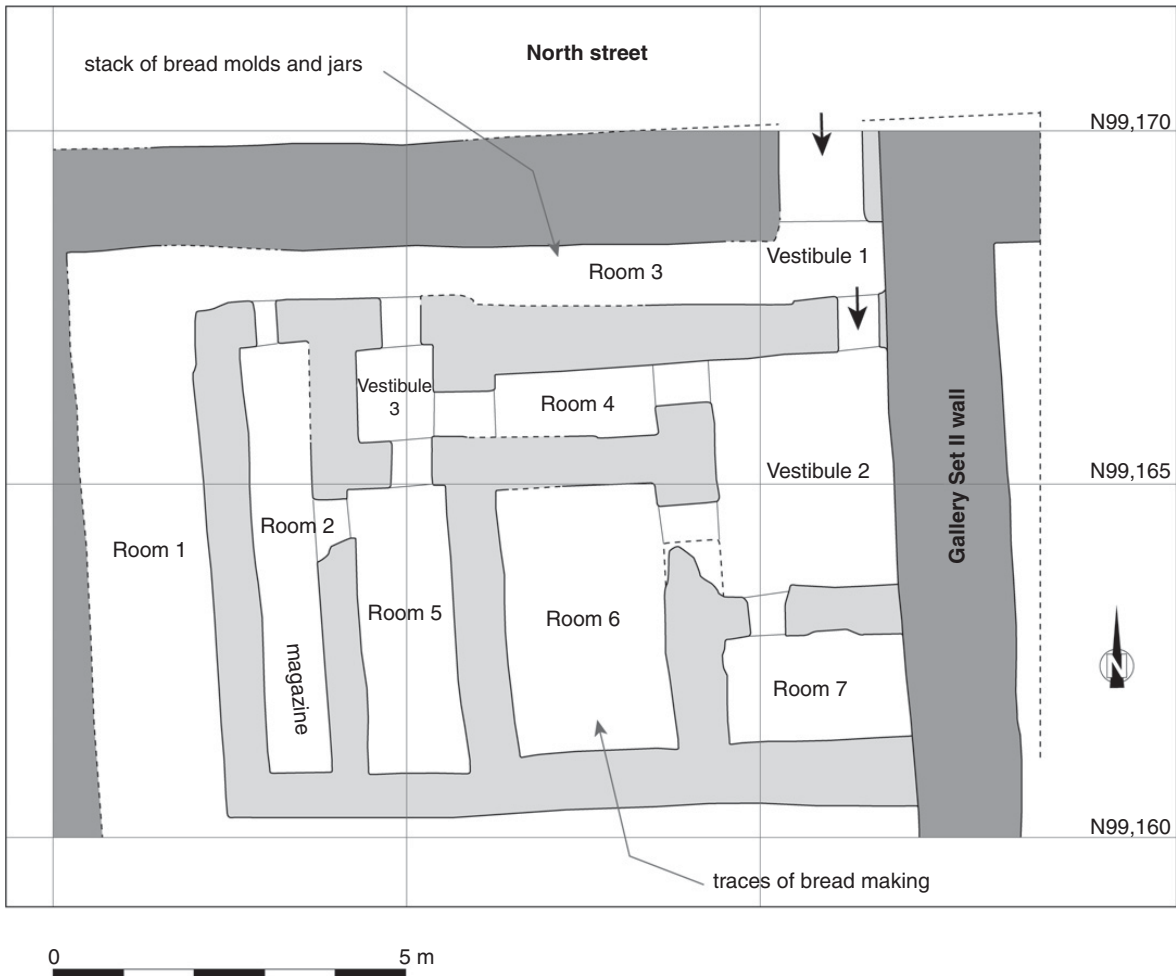


6.5. Plan of House K at the Khentkawes town (late 4th Dynasty) at Giza. By G. Marouard, after M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project: Season 2008. Preliminary Report*, GOP 4, 2009, 16, fig. 7a.

6.2.4 The Eastern Town House at Heit el-Ghurab

Similarly, there is good evidence for the presence of larger outer rooms being used for storage and food production at the Eastern Town House at Heit el-Ghurab. This structure belongs to the part of the so-called Eastern Town,

which has been considered as having had a more “rural” character in comparison with the rest of the settlement (Figure 5.16).²⁹ The central core unit of this house is quite small, measuring only 3.6 m by 5.3 m, while the total complex – including the larger outer rooms and



6.6. Plan of the North Street Gate House of Gallery Set II (4th Dynasty) at Heit el-Ghurab site at Giza. By G. Marouard, after M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project Season 2004, Preliminary Report*, GOP I, 2009, 12, fig. 14.

courtyards – covers about 100 m² (Figure 5.16).³⁰ The main access from the street opened into a kind of vestibule (Room E) that led south to Room H, a large L-shaped courtyard used for storage and manufacturing activities (Figure 5.16). To the east, Room E had a doorway that opened into Room A, which had been filled by much ash. Room C, lying next to Room A, contained a small limestone basin and a pottery bowl, both of which had been set into the floor. To the south of Room C, another room (F1) could be accessed, and this was occupied by a round silo in its center. Farther south, another L-shaped room (F2) also provided evidence for a storage bin (F3). None of these rooms had any access to the central core unit but were kept separate and only accessible through the entrance of Vestibule E, crossing Rooms A and C (Figure 5.16).

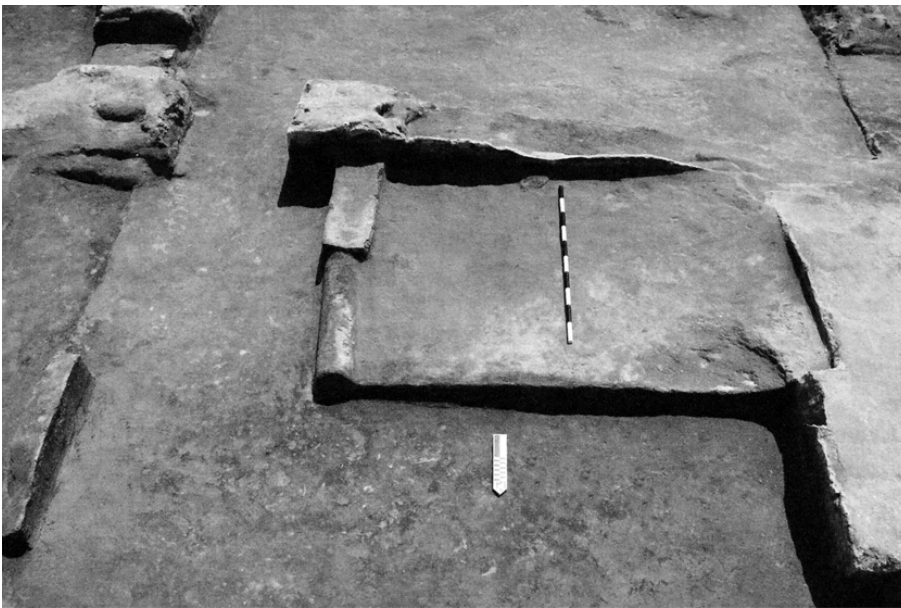
The core of the building was entered through Courtyard H and by accessing a small vestibule (B2), which led into the main room (B1). This was the central feature of the building, with the typical rectangular layout measuring 5.15 m by 2.10 m. A discrete niche probably used for sleeping was found on the southwestern side of it (Room G) (Figure 5.16).³¹ A mud-brick bench had been built against the eastern wall of the main room.

The Eastern Town House is thus a good example of a domestic building showing much space devoted to storage and production activities, while the core unit is comparable to the other houses from Giza as presented previously. The main room seems to have been used for living and sleeping and did not necessarily serve a single purpose – for example, “reception room.”

6.2.5 House Unit 1 of the Western Town at Heit el-Ghurab

On a larger scale and showing a more elaborate plan, House Unit 1 of the Western Town at Heit el-Ghurab presents another excellent example of a residential core unit that is surrounded by additional storage and production areas. There is a strong possibility that Unit 1 also had an administrative function or was at least used by elite residents who were officials closely linked to the central government (Figure 5.15).³² It occupied an area of about 400 m², which makes it the largest house in the Western Town at Heit el-Ghurab. As usual, the core unit forms the center of the house. In this case it is made of the seven individual rooms of which three comprise larger rectangular spaces with the common proportions of 1:3 (rooms 10,780, 10,776, and 10,779; see Figure 5.15).³³ The largest of them (10,780) has protruding half pillars separating the southern third of the room from the rest. Here excavators found a double sleeping platform, the foot of which is modeled to resemble a footrest (Figure 6.7).³⁴ The next room in the center of the building (10,776) was equipped with a mud-brick bench in L-shaped form leaning against the western and southern walls. The eastern room in this row (10,779) contained two additional sleeping platforms and two small storage compartments occupying its center (Figure 5.15).

The eastern part of House Unit 1 was occupied by a large bakery made of four almost equally sized square rooms fronted probably by an open space (Figure 5.15). The access to the bakery unit was via a long, narrow corridor that stretched along the southern side of the core unit, which was divided into two parts (10,764, 10,788).³⁵ Several storage installations, including two large rooms resembling magazines or rooms used for production/manufacturing activities, comparable to House Unit 3 (see following), occupy the western side of the building complex. The eastern one shows one preserved half pillar toward its southern end. From the refuse deposit called Pottery Mound, which contained a large amount of broken clay sealings and which has been excavated along the southern exterior of Unit 1, it can be deduced that administrative activity was carried out inside. From the architecture alone it is not possible to distinguish any rooms or areas that could have been used for such a purpose. It is likely that some official business was conducted in the central room with the long bench (10,776) or in the large rectangular hall on the western side of room 10,780 – but as the current evidence stands, this has to remain speculative.



6.7. Bed platform with footrests in House Unit 1 (4th Dynasty), Western Town of Heit el-Ghurab site at Giza. After M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project: Seasons 2006–2007, Preliminary Report*, GOP 3, 2009, 90, fig. 37. © AERA, photo by Y. Kawae.

6.2.6 Unit 3 of the Western Town at Heit el-Ghurab

The final example of a large domestic building that has been fully excavated lies to the east of the main north–south street in the Western Town. The street seems to end right next to the southwest angle of this building, which has been called House Unit 3.³⁶ Although less well preserved than Unit 1 of the Western Town, Unit 3 is an interesting example of some variation in the layout of a larger elite building dating to the Fourth Dynasty. It covers a total surface of about 200 m² and is therefore smaller than Unit 1.

Unit 3 was accessed from the main north–south street of the Western Town via a long corridor on the exterior of the building, which led to a possible entrance on the southeastern side (see Figure 6.8). Its core unit is less easily recognizable in comparison with the previous examples because the main room (H) seems to have been a small open courtyard with a tree in its center.³⁷

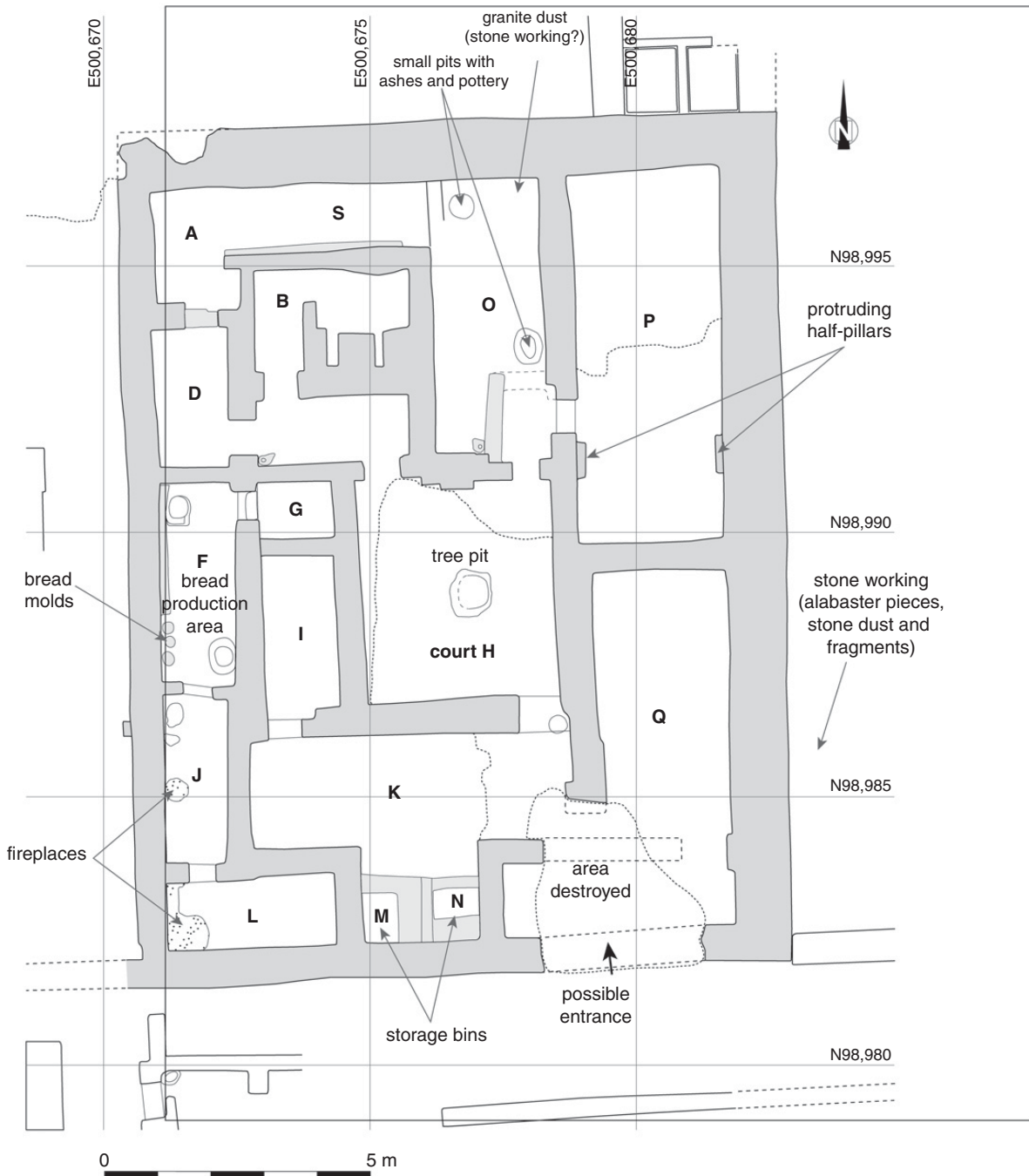
West of this courtyard several rectangular rooms of the usual proportions can be seen, in addition to a long corridor that has been divided into three distinct portions (F, J, and L). These spaces had been used for food and bread production as well as storage, according to the floor assemblages recovered during the excavations. Further installations such as bins and fireplaces were also found on the floors, in conjunction with much pottery. Two square storage bins (M and N) were located just south of room K and east of room L (Figure 6.8). To the eastern side of the central part of the house lay two larger halls (P and Q) of rectangular shape, which measure about 6.5 m by 2.5 m each. Both of them show the typical pair of protruding half pillars toward the southern end of the room (Figure 6.8). However, their location on the eastern side of the actual core rooms (O, K, and I) is comparable with that of the two large rooms west of the core unit in House Unit 1 (Figure 5.15). The general preservation of the two halls (P and Q) does not allow for any further interpretation as to their function. They could have been used as two additional residential areas, or it is equally possible that they served for manufacturing or production activities, implied by the discovery of a refuse deposit containing calcite dust and worked calcite fragments on the exterior of room Q (Figure 6.8).³⁸ The excavators had difficulties locating the main entrance to Unit 3 and suggested that it was from the southern side, close to room Q. If this is correct, it is unlikely that Q and P ever comprised the private living rooms of this building complex, because they are too exposed and lie too close

to the main entrance. In none of the other examples presented in this discussion is there evidence for an almost-direct access to the inner residential rooms. If the interpretation here is correct, then the function of the niche created by the two protruding half pillars in rooms P and Q might not have been for sleeping but some other purpose, maybe simply a spatial division, and suggests the use of caution in assigning a single use to these niches that are so typical for Old Kingdom houses.

6.3 HOUSES AT ELEPHANTINE

Leaving Giza and focusing on the provincial regions, the southern frontier town of Elephantine is currently one of the best-known Old Kingdom settlements in the Nile Valley. Early Old Kingdom remains have been excavated in front of the Early Dynastic fortress, which saw a development of several building complexes and larger open courtyards into a large stone workshop by the end of the Third/early Fourth Dynasty.³⁹ A larger building complex (Building A) belonging to the first phase of occupation, dating to the first half of the Third Dynasty, has been excavated to the east of the former southern gate of the fortress (Figure 5.34). According to Martin Ziermann, who was in charge of excavating this zone, the newly discovered settlement area consists of administrative/official buildings linked to a production zone and possibly strongly linked to the central government in the north of Egypt.⁴⁰ Building A shows some similarities to the later buildings at Giza, a fact that was remarked upon by Ziermann. He also emphasizes the fact that the layout of this small town quarter is quite different from that of the earlier settlement remains on the island of Elephantine, which contained much more informal-looking and less structured buildings.⁴¹

In the first phase (VII.1), the reconstructed entrance situated at Building A was marked by a main doorway leading into a long corridor (1) that gave access to a small vestibule-like room (2). Room 2, in turn, opened onto smaller rooms at the northern side of the building but also led into a large rectangular room or hall (3) measuring about 6.8 m by 2.3 m, with proportions that compare well, for example, with rooms P and Q in Unit 3 of the Western Town at Heit el-Ghurab. The southeastern part of room 3 was marked by the usual pair of protruding half pillars. A doorway at the southeastern corner led into another room (4) of almost identical size and layout as room 3 (see Figure 5.34).



6.8. Plan of the House Unit 3 (4th Dynasty), Western Town of Heit el-Ghurab site at Giza. By G. Marouard, after M. Lehner, M. Kamel, A. Tavares, *Giza Plateau Mapping Project, Season 2005 Preliminary Report, GOP 2*, 2006, 74, fig. 13.

For both of these rooms it is evident that the area marked by the half pillars could not have been used for sleeping, because this space had to be traversed when going from one room to the other.⁴² Almost no traces related to the use of these rooms have been found during the excavation that could have offered some additional

information. There is also no mention of storage installations, fireplaces, and the like in the archaeological report, but there seems to be evidence for food production and storage installations in the exterior courtyards to the western side, which was connected to Building A (Figure 5.34).

In the second building phase (VII.2) – which also dates to the first half of the Third Dynasty and probably followed quite quickly after the first phase – an additional set of rooms was added against the western side of Building A, expanding it to a total size of 85 m² (Figure 5.35). The largest room of this new addition (2, 3; see Figure 5.35) was also accessed via a long corridor (1). The same protruding half pillars acted as room dividers of the southeastern part of the new room, and a small niche with traces of painted plaster imitating wood was found at its rear wall.⁴³ This expansion of Building A to the western side also led to a reorganization and subdivision of the two older main rooms into smaller units, which then started to resemble much more the core-unit concept observed at the Giza settlements (Figure 5.35). Additional information as to the possible use of these rooms belonging to phase VII.2 of Building A is also lacking. The large open courtyards (I, II, V) situated farther to the west were also altered. They now include additional storage facilities such as round silos and storage jars that were embedded in the floors, but there has also been some evidence for food production.⁴⁴ Another large building complex, Building D, of which only two corridors and parts of a larger central room were preserved, can be seen to the northwestern side (Figure 5.35). South of the whole quarter, separated by a small pathway, a stone workshop was identified that became increasingly prominent and eventually took over this settlement quarter by the mid-Fourth Dynasty, which comprises the third phase of occupation (VIII) (Figure 5.36).

While certain elements closely resemble the buildings at Giza, it has to be emphasized that these structures excavated at Elephantine are of an earlier date. There is no concrete evidence for any administrative activities in the form of sealings from Building A, and its official/administrative character has mainly been inferred from the architectural parallels at Giza.⁴⁵ It has also not been possible to learn more about the inhabitants of this settlement quarter from the excavated remains alone.⁴⁶ In that respect, a direct influence from the Memphite region at Elephantine based on the architectural evidence alone cannot be supported as the evidence stands right now. The size of Building A – which was less than 50 m² during the first phase of occupation and was enlarged to almost 90 m² in the second phase – is also much smaller than that of the elite buildings found at Giza. The examples from Elephantine fall into the range of smaller domestic buildings. Nevertheless, the previously mentioned similarities of certain architectural features between the Fourth Dynasty buildings from

Giza and those earlier ones from Elephantine provide some new evidence for the development of a distinct house type from the early Old Kingdom onward. It is currently not possible to be certain about where the origins of this layout could have been, whether in the Memphite region, which is likely but not yet proven, or in other parts of the Nile Valley.

6.4 THE LAYOUT OF THE RESIDENTIAL PART OF THE GOVERNOR'S PALACE AT AYN ASIL IN THE DAKHLA OASIS

The late Sixth Dynasty gubernatorial palace complex at Ayn Asil, situated in the Dakhla Oasis, provides further evidence for the typical layout characterizing residential and administrative buildings dating to the Old Kingdom.⁴⁷ The French Archaeological Institute in Cairo (IFAO) has focused on the excavation of this large palatial complex, which functioned as the residence but also as the administrative seat for several generations of oasis governors. This distinct compound is characterized by residential units as well as large storage magazines, and to its western side are four *ka*-chapels with related storage and food production areas constituting outbuildings (Figure 5.42). The palatial complex was built as a result of several phases of expansion, which saw a continuous shift of the settlement area toward the south, while the fortified enclosure occupying the northern part of the site fell out of use and became gradually integrated into the settlement.⁴⁸

The palace complex extends over an area of about 1.5 ha (excluding the *ka*-chapels and related outbuildings) and can be divided into northern and southern halves at a large open area in its center where the archaeological remains have been severely disturbed (Figure 5.42).⁴⁹ The northern half of the palace consists of two residential units or “apartments” – an eastern and a western one. The former was built slightly earlier than the latter, and both were abandoned after a large conflagration destroyed a major part of the palace at the end of the reign of Pepi II. This fire led to an excellent preservation of the objects left within the rooms, and the dark negatives of the burnt wooden elements such as doors and columns can be seen on the preserved mud floors.

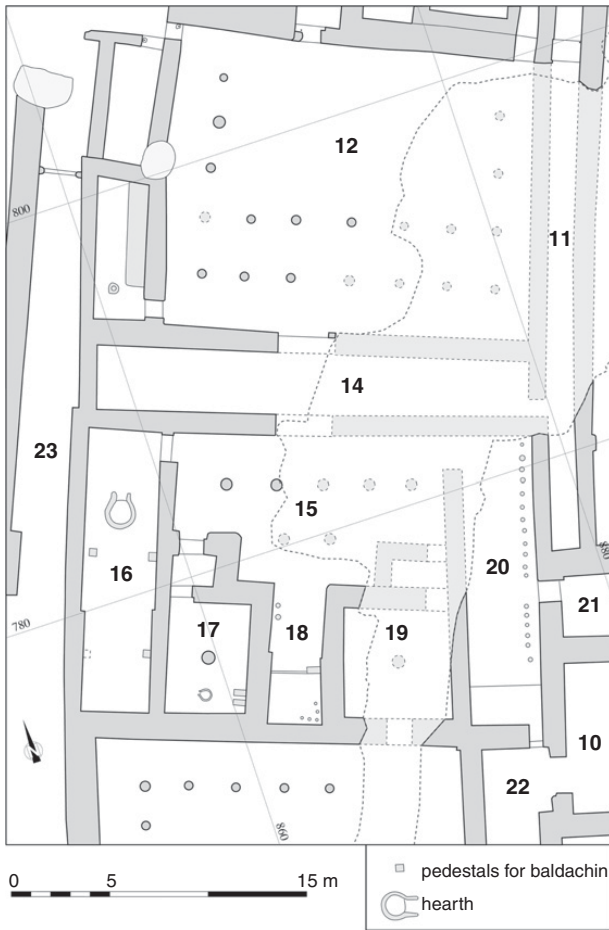
The so-called Eastern Apartments are characterized by a columned hall (1) consisting of two rows of five columns each on the northern side. This hall gave access to a smaller portico-like room (2) with two columns and a hearth in the center, which fronted the innermost core of



6.9. Plan of the Eastern Apartments of the governor's palace (late Old Kingdom) at Ayn Asil. By G. Marouard, after C. Jeuthe, *Balat X: Ein Werkstattkomplex im Palast der 1. Zwischenzeit in Ayn Asil*, *FIFAO* 71, 2012, 34, Abb. 2.

the Eastern Apartments (rooms 3–5) (Figure 6.9). Room 2 was also accessible from the western side through an elongated room (6) with two preserved columns, possibly three. Toward the southern end of this long room (6), two protruding half pillars can be seen. On its northwestern side, room 6 had a doorway to a long corridor (7) connecting this part of the building to a small hall (8) and another portico (9), also equipped with a hearth, to the south (see Figure 6.9). This second, southern portico (9) was equally linked to a larger columned hall (10). Thus, the core unit was accessible through the northern side of the complex as well as from the south.

The northern columned hall (1) occupied an important position as part of the Eastern Apartments, because it gave access to three discrete areas. The doorway on its western side led into a long corridor (11), which was linked to a much larger peristyle court (12) just north of the Western Apartments and therefore provided a direct connection between these two residential portions of the palace (Figures 6.9 and 6.10). This impressive peristyle court formed an important feature within the northern half of the palatial complex. Through it, not only were the Eastern and Western Apartments accessible, but it also gave access to a further set of rooms along the northern



6.10. Plan of the Western Apartments of the governor's palace (late Old Kingdom) at Ayn Asil. By G. Marouard, after C. Jeuthe, *Balat X: Ein Werkstattkomplex im Palast der 1. Zwischenzeit in Ayn Asil*, FIFAO 71, 2012, 34, Abb. 2.

side of the complex (Figures 5.42 and 6.9).⁵⁰ A further point worth mentioning in connection with the Eastern Apartments is that there was another doorway on the eastern side of the northern columned hall (1) that led to a row of rectangular storage magazines (13); this emphasizes the economic role of the palatial complex (Figure 6.9). As mentioned previously, the third doorway on the southern side of the northern columned hall (1) led into the two-columned portico (2) that gave direct access to a small court (4) that stood in the middle between the two larger private rooms (3 and 5). In the center of each of the L-shaped rooms (3, 5) a horseshoe-shaped hearth can be seen that was probably used as a source of heat during the winter months.⁵¹ The layout of these private rooms follows a symmetrical arrangement on each side of the

small central courtyard or hall (4) and shows the typical L-shaped form that has already been encountered at other Old Kingdom buildings (Figure 6.9). For example, the entire arrangement of these rooms is almost identical, although on a different scale, to the inner core units of the houses at the Khentkawes town (compare Figures 6.2a and b). In addition to a central hearth, each of the L-shaped rooms (3, 5) was equipped with four limestone pedestals that had a square depression on their surfaces, interpreted as supports for wooden posts that could have held a baldachin or canopy structure.⁵² Fragments of painted wall plaster have also been discovered here, indicating that the walls had been decorated with a colored plaster coating, similar to what has been found, for example, in Building A at Elephantine.⁵³ In addition, plaster fragments with negative impressions of the roofing were found in debris on the floors. Acacia beams formed the main roof support, which had been covered by a layer of smaller branches and twigs and in turn were overlaid by a thick layer of mud plaster. The excavators estimate the total height of the rooms to have been about 4 m.

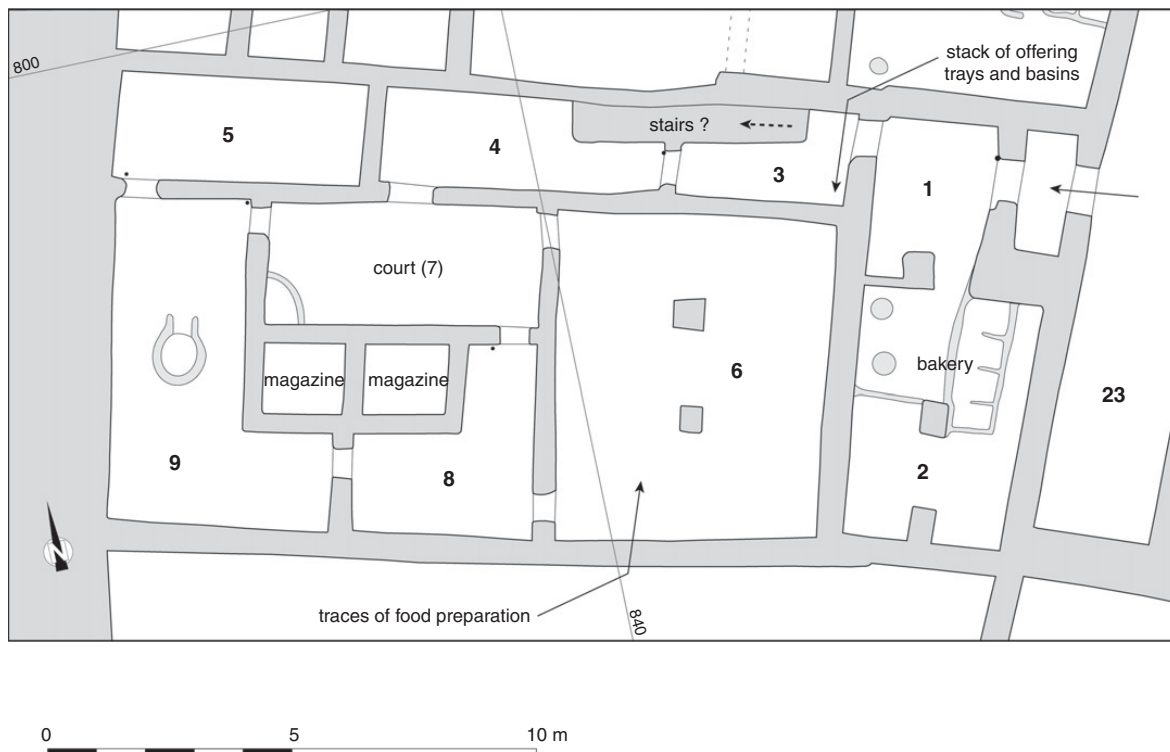
As mentioned previously, the Western Apartments are situated to the southwest of the eastern ones and were constructed slightly later (Figure 6.10). They had been in use when the fire struck, which led to the preservation of many objects within the various rooms, providing some further insight into their function. The rooms of the Western Apartments also followed a symmetrical arrangement, comparable to the eastern ones outlined at the beginning of this section. From the large peristyle court (12), a doorway on its southern side led through an elongated room (14) and into a smaller, columned hall (15) that functioned as a kind of entrance hall in front of the residential chambers (16–20) (see Figure 6.10). To the west was the largest room (16), with a hearth embedded in its floor, and toward the rear another set of four limestone pedestals were found, which probably had been used to support the wooden frame of a canopy similar to what has been discovered in the two L-shaped rooms of the Eastern Apartments (Figure 6.9). Adjacent to room 16 and also accessible from the columned hall (15) was a smaller room with two columns (17) that could be reached through a small anteroom. In the main axis of the peristyle court lay a small open space (18) that might have had a more official function because its interior was directly visible from both the columned hall and the peristyle court (12). It might have been a kind of reception room or the seat of the governor for official functions; its rear part was slightly set apart and looks like it might have formed a niche.

The eastern half of the Western Apartments was less well preserved and consists of two further rooms (19, 20), each of which had an additional doorway connecting it to the other parts of the palace farther south. The doorway at the southern side of room 19 leads to another magazine tract. The small entrance on the southern end of room 20 gave access to another corridor (22), which was linked to the southern courtyard (10) of the Eastern Apartments and thus connected both residential units. The finds indicate a mix of residential and official/administrative use for the Western Apartments. For example, a concentration of thirty-one clay tablets was discovered in the large peristyle court (12); these provide good evidence for administrative activity having been carried out here.⁵⁴ A crushed jar inscribed with the name and titles of Governor Medu-Nefer has been found here too.

To the western side of the actual palace apartments, and separated from them by a long north-south corridor (Figure 6.11, no. 23), were the four *ka*-chapels dedicated to the cult of the local governors (Figure 5.43). Closely linked to these chapels lies a long strip occupied by various buildings arranged in several parallel rows that

functioned mainly as storage and production facilities but which also seem to have included residential rooms probably used by the staff involved in the upkeep of the *ka*-cult at the chapels.⁵⁵ Among these structures, in the third row from the north, lies a building complex that has been identified as one of possible domestic use (Figure 5.43).⁵⁶ It certainly has some resemblance to the other examples already discussed in this chapter, although the core rooms are less clearly marked and did not necessarily occupy a central place within the building, being slightly set off to the western side (Figure 6.11). This could be related to the restricted space available in this whole complex of outbuildings. From the entrance on the eastern side, a small vestibule in the form of a square room (1) gave access to a long corridor (3, 4) that had remnants of a staircase leaning against its northern wall. This corridor led directly to the back rooms, which comprise the actual residential unit (Figure 6.11).

The square vestibule near the entrance (1) had a second doorway on its southern side that led into a large room complex that had functioned as a bakery (2). In the southeastern corner of the corridor (3), a large number



6.11. Building of the 3rd row of the outbuildings (late Old Kingdom – 2nd Phase, preconflagration) at Ayn Asil. By G. Marouard, after G. Soukiasian, M. Wuttman, and L. Pantalacci, *Balat VI: Le palais des gouverneurs de l'époque de Pépy II. Les sanctuaires de ka et leurs dépendances*, FIFAO 46, 2002, 152, fig. 128.

of oval offering trays were found among several stone offering and libation basins (Figure 6.11). These were carefully piled up in two layers, and about ten of the offering trays had been placed upside down into the ground, with further trays and stone basins on top.⁵⁷ This discovery demonstrates the close connection between the inhabitants, the bakery, and the task of providing provisions for the cult chapels.

Even if its location and bakery area indicate that this building was not a simple “house” but linked to the service of the cult chapels, it also contains a residential part, which shows characteristics similar to those of other Old Kingdom domestic buildings. Two L-shaped rooms (8, 9) occupy the western side of this house, of which the larger one is marked by a centrally placed horseshoe-shaped hearth. A larger hall (6) with two pillars to support a roof lies in the center of the building. This room was most likely used for multiple activities, as can be witnessed by traces of food preparation that have been noted on the floor. It was accessed through a small court (7), which also had further doors to the more private and residential rooms (8–9) along the western side of the complex. In terms of access patterns, this courtyard (7) was the central point from where most of the other parts of the building could be entered. Two square storage magazines lay just to the south of the courtyard.

The bakery area was kept as a separate unit from the rest of the house and is only accessible from the small entrance hall (1). The overall organization of this building resembles that of House Unit 1 at the Western Town of Heit el-Ghurab, where the bakery area attached to the house also remained a discrete unit along the eastern side of the building in its first phase of occupation. In addition, it can be noted that for many of the discussed examples, the long and often-subdivided corridors within the buildings were frequently used for storing pottery vessels. A feature that seems to be typical for Ayn Asil is the numerous horseshoe-shaped hearths that have been excavated within different areas of the palatial complex and that might be another indicator for rooms with a residential function. The hearths seem to be characteristics for the oasis settlement and probably provided heat during the cold winter months.

6.5 THE LAYOUT OF BUILDING C AT AYN EL-GAZZAREEN

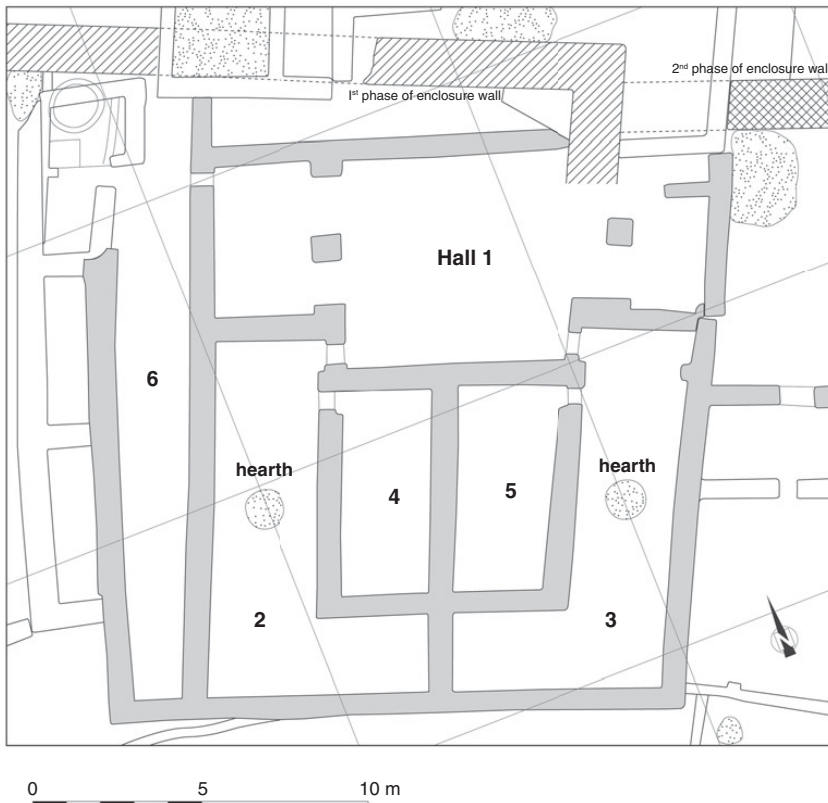
The recent excavations of the settlement site at Ayn el-Gazzareen in the northern part of the Dakhla Oasis has led to the discovery of a large building complex, Building C,

that has parallels to the Eastern and Western Apartments of the governor’s palace at Ayn Asil (Figure 5.45). Building C belongs to a later settlement phase and has been dated to the Sixth Dynasty according to the ceramic evidence, making it contemporary to the structures at Ayn Asil.⁵⁸ It extends over an area of about 175 m² and is currently the only building at the site that can be recognized as a self-contained structure or unit. This feature makes it stand out from the sheer maze of mud-brick rooms and courtyards on the eastern and southern sides of this settlement (Figure 6.12).

The layout of Building C is characterized by a central hall (1) that contained a couple of square pillars to its eastern and western sides (Figure 6.12). The hall had two small doorways along its southwestern and southeastern corners, each of which led into a large L-shaped room (2, 3). Each room had a round hearth in the center (Figure 6.12). Adjacent to these rooms and accessible through a small doorway, two smaller rectangular rooms (4, 5) can be seen that occupied the center of the building. Both of these rooms were only accessible via the L-shaped ones, and neither the eastern (2, 4) nor western (3, 5) set of rooms interconnected directly. The central hall (1) was the main space through which the rest of the building could be reached.

Some of the walls were covered by a thick layer of gray mud plaster, and several traces of red and yellow pigment have been found.⁵⁹ A couple of small limestone column bases were the only other distinctive element recovered from the interior of Building C. Their small size, measuring only 20 cm in diameter, makes it very unlikely that they had a specific structural function.⁶⁰ However, the traces of red paint noted on the surface of these column bases show negative prints of the wooden columns that once stood on them, which could be an indication for them having served to support a canopy structure – similar to the situation found in the apartments of the governor’s palace at Ayn Asil.

While no distinctive finds have been found on the floor levels and few ceramic sherds have been recovered, the importance of the building can be deduced from its architecture and the comparison with Ayn Asil, where similar L-shaped rooms with central hearths have been excavated (see [previous section](#)). This similarity in size and layout (see Figure 6.2b) would strongly suggest that Building C was an elite residence of some kind, maybe for the highest official in charge of the settlement. The other possible function that has been suggested by the excavators is that Building C was a temple, but this seems unlikely in view of the evidence and comparative



6.12. Building C (6th Dynasty) at Ayn el-Gazzareen. By G. Marouard, after A. J. Mills, O. E. Kaper, “Ain el-Gazzareen: Developments in the Old Kingdom Settlement,” in G. E. Bowen, C. A. Hope (eds.), *The Oasis Papers* 3, 2003, 124, fig. 1.

material from other sites dating to the Old Kingdom. The shape of the rooms and the presence of hearths compares extremely well to the evidence from the residential areas at the palatial complex at Ayn Asil/Balat, while none of the *ka*-chapels show any such layout.⁶¹ Furthermore, it is evident that these two settlements stood in close contact with each other, which has also been suggested, for example, in view of the sealing evidence that indicates that they were part of the same administrative system.⁶² Even though Ayn el-Gazzareen is smaller than Ayn Asil, it is not surprising to find comparable architectural layouts at both settlements.

6.6 CONCLUDING REMARKS

The archaeological data concerning house layouts shows first evidence for the presence of a distinct type of layout, found in various regions, during the third millennium BCE. This type shows up in different kinds of settlements and covers a wide range of sizes. In view of the discussed archaeological and architectural evidence, it is now possible to define a typical house type for the Old Kingdom,

consisting of a core unit of several rooms in the center of each house and often constituting the residential parts. The core units are characterized by at least one larger rectangular room or hall with two protruding half pillars visually separating a smaller area of discrete niches, which lies most commonly toward the rear of the room (Figure 6.2a). These niches have been interpreted as sleeping areas according to several instances in which sleeping platforms have been found in this part of the room. However, such platforms are not always to be found, especially because they seem (as far as the current evidence shows) to be a phenomenon restricted to the Memphite region. It is very likely that the niches created by the half pillars were also used for other purposes such as simple room dividers. Additional rooms and open areas surrounding the core unit can provide evidence for food production and storage as well as manufacturing activities, depending on the overall size of the house. Also typical is the access and entrance situation for the houses. From the exterior, first a vestibule was entered, and this was usually followed by a long corridor, divided into different segments, that led through more vestibules or

corridors into the heart of the building. From the street, it was impossible to gain a direct sight line into the building, and the layout of the corridor added further complexity for reaching the inner rooms. This is a notable characteristic, which indicates that privacy was an important matter for the households and contrasts the residential with the more “public” exterior space. Architecturally, the corridor principle, together with the “Schrankenprinzip” feature – meaning that doorways rarely lie on the same axis – already appeared during the Early Dynastic Period and can be witnessed very clearly at the building complex excavated at Buto.⁶³ These characteristics could be considered an expression of privacy within the houses, which seems to have been an important principle employed in the construction of domestic buildings in towns and cities dating to the Old Kingdom.⁶⁴ This does not mean, however, that individual households kept to themselves in isolation; there is much evidence for the interconnectedness of the local communities. According to the evidence, inhabitants shared many facilities and spaces within the settlements, but there was no public display of status within the houses, such as special decorations and room features (except for some evidence of painted walls), that can be recognized from the preserved archaeological evidence. This characteristic of Old Kingdom residences stands in contrast to that of Middle and New Kingdom houses, where size, columned porticoes, and halls seem to have been markers for a certain prestige and status of the inhabitants. For the Old Kingdom, another observation can be made in relation to residential quarters: there seems to have been a general absence of any particularly organized street network, and the streets and pathways were often used to deposit household refuse.⁶⁵

In terms of room use within domestic buildings, it seems that there is not a single case for a room of the core unit having served only a single purpose. On the contrary, evidence for sleeping and living was found in the central rooms, often in addition to food preparation spaces and small storage compartments within the core units. There are no signs, even in the larger elite houses, for areas that served solely a representative function – for example, to receive and impress guests – but everything points to an emphasis on privacy, which is further supported by the distinct access patterns of rooms. However, this situation does not exclude administrative activities being carried out in some of the central rooms. The archaeological evidence shows that administrative tasks were conducted in the same buildings that were used as residences. For example, this can be seen quite

clearly at Unit 1 in the Western Town of Heit el-Ghurab at Giza. This structure stood in the part of the ancient town that was occupied by members of the elite, which is confirmed not only by the size and complexity of the buildings but also by faunal remains.⁶⁶ The large amount of broken clay sealings excavated in front of House Unit 1, found within the so-called pottery mound deposit, suggests that administrative work was carried out here too. The architecture and layout of the core rooms does not permit any specific distinction of rooms for “representative or official use,” despite the fact that some of these rooms had been decorated with colored wall plaster, which some scholars have interpreted as a sign for being a more formal “reception” area.⁶⁷ Evidence of color has been found on the walls of several rooms belonging to houses of very different sizes and status but cannot be used as a sign for more “public display” or as a status symbol for the inhabitants. The archaeological evidence points toward a certain degree of multifunctionality of all spaces within the core of the residential buildings dating to the Old Kingdom. This is also the case for the palatial complex at Ayn Asil, which, with its large size and complexity, stands out from the other examples discussed here. The excellent preservation of the material culture within the Eastern and Western Apartments has provided good evidence that administrative activities were carried out in the outer columned halls and also within the actual residential or “private” rooms.⁶⁸ It is evident that for the Old Kingdom it is not possible to distinguish any buildings that served solely administrative and official purposes or were of representative nature.⁶⁹ The only possible representative space can be recognized in the central room (18) of the Western Apartments at Ayn Asil; this room lies in the central axis of two columned courtyards (12 and 15) (Figure 6.10). In most instances, however, it is mainly from the finds within the rooms that it is possible to learn more about the various activities that were carried out within them, whereas the architecture does not reflect any significant differences. Other elements of the palatial complex include large magazines for storage and also areas for food production and manufacturing activities. As will be shown in the following chapter, the slightly later gubernatorial residences at Elephantine and Ayn Asil/Balat, which date to the First Intermediate Period and early Middle Kingdom, also combine multiple functions within the same building complex, ranging from residential to administrative uses but also including cultic aspects.

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The Development of Towns during the End of the Old Kingdom and the First Intermediate Period (ca. 2200–2050 BCE)

7.1 INTRODUCTION

The political developments at the end of the Old Kingdom – specifically after the long reign of Pepi II, which was followed by a rather unstable period of rulers succeeding each other at short intervals – seem to have led to an economic decline and a breakdown of the administrative system. This situation can be deduced, for example, from the apparent lack of royal funerary monuments of a monumental scale during this time, which stands in sharp contrast to the abundant architectural trappings of most of the royal mortuary complexes of the Old Kingdom period proper. In the past, numerous studies and overviews of ancient Egyptian history have painted this “first intermediate period” as a time of political turmoil, famine, and social disorder – and even climate change.¹ Most of these claims and interpretations are based on textual records – for example, the well-known *Admonitions of an Egyptian Sage* or the equally famous *Prophecy of Neferti* – none of which describe historical events or even claim to be set in the First Intermediate Period. This genre of “pessimistic literature” was in fact developed as a group of literary texts during the Middle Kingdom.²

The archaeological evidence, especially from the region of Upper Egypt, indicates a very different situation.³ It characterizes the First Intermediate Period as an episode that was culturally very dynamic, especially among the poorer levels of society, and set many new parameters for the following Middle Kingdom. As Stephan Seidlmayer states very adequately: “The First Intermediate Period, however, was not just a time of disorder in terms of the succession to the throne of Egypt; it was also a period of crisis and of new developments, both of which deeply affected the whole of Egyptian society and culture.”⁴

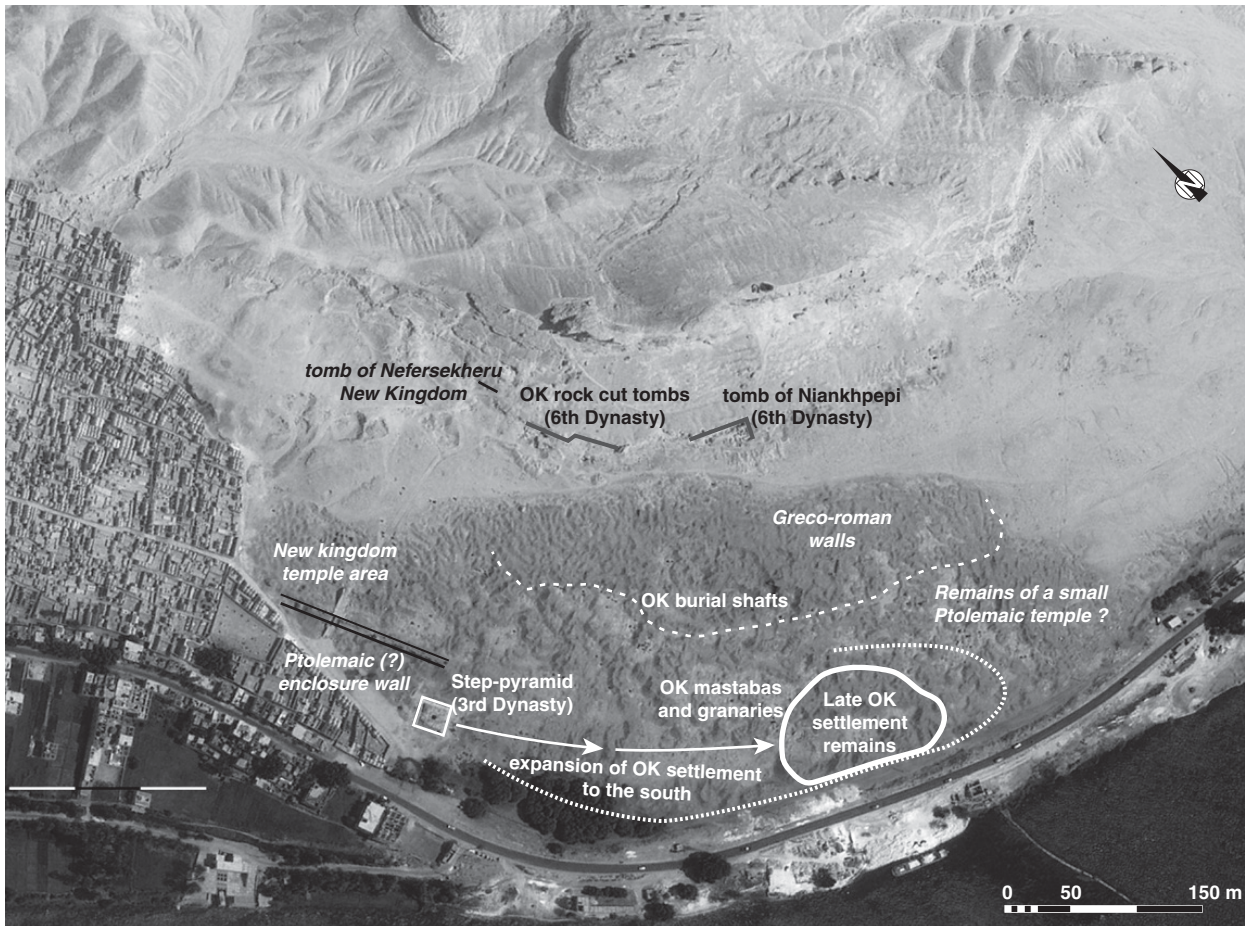
These new developments are especially visible in the material culture but also had much impact on the

evolution of settlements. The presence of towns and cities in the Nile Valley outside the Memphite region becomes much more prominent from the late Old Kingdom onward, and it is possible that there has also been a general population increase during the time, which will be discussed further here. The relevant time frame from which the archaeological data will be analyzed in depth in this chapter concerns the end of the Sixth Dynasty up to the second half of the Eleventh Dynasty, when the country was unified under Mentuhotep II, who is the first ruler of the Middle Kingdom proper. In absolute terms, this period encompasses only a relatively short period of time, lasting for about 150 years.⁵ While fragmentation characterizes the political sphere, with local nomarchs fighting against each other over power and control, culturally it is possible to witness the emergences of new ceramic repertoires, tomb architecture, and art styles, which were often much influenced by local traditions.

Even though the archaeological evidence is far from being complete, there is evidence indicating that settlements flourished and expanded during this time in the south of Egypt. For Middle Egypt and the northern parts, there is much less information available, but the trend that emerges suggests a different development in comparison with Upper Egypt. The following sections will present an analysis of the archaeological data from different regions within Egypt (Figure 5.1).

7.2 THE MEMPHITE REGION: A WIDESPREAD ABANDONMENT OF SETTLEMENT SITES LINKED TO ROYAL MORTUARY CULTS

There is much evidence that the Memphite region was affected by a widespread abandonment of all the settlements formerly linked to the royal mortuary complexes – such as



7.1. Satellite view of Zawiet Sultan/Zawiet el-Meitin archaeological area (2006) with location of the Old Kingdom and First Intermediate Period settlement remains. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe.

the pyramid towns and the priests' accommodations at the pyramid temples – which had been used by the staff for the upkeep of the royal funerary cults. This seems to be the case despite the fact that many of these settlements had seen an important phase of renewal during the Sixth Dynasty.

A recent drill-core survey at Dahshur has shown a thick layer of sand accumulation lying directly above the final Old Kingdom settlement remains, marking a hiatus in occupation that lasted up to the Middle Kingdom, when Dahshur was again used as a royal cemetery.⁶ It is interesting to note that the location of the former pyramid town of the Red Pyramid was reoccupied during the Twelfth Dynasty, although probably not much of the ancient remains had remained visible, being buried deeply under the sand (Figure 5.8).⁷

Similarly, the Khentkawes town and the Menkaura Valley Temple site at Giza, both of which had seen a

major phase of renovation and reoccupation during the Sixth Dynasty, were completely abandoned during the First Intermediate Period.⁸ Further to the north, the pyramid complex of the Fourth Dynasty ruler Radjedef and his cult and related settlement was still functioning during the Sixth Dynasty – probably also as a kind of revival after a similar hiatus that has already been noticed for the Giza sites – but was deserted thereafter. The late Old Kingdom occupation at Abu Rawash is marked by a phase of expansion and renovation dating to the Sixth Dynasty, especially noticeable in the northeastern extension within the pyramid temple complex.⁹ At the end of the Old Kingdom, this mortuary complex was abandoned too.

These are just some examples of the end of settlement sites in the Memphite region, but they are part of a wider phenomenon that saw the almost-simultaneous abandonment of these settlements and habitation sites situated at

or nearby royal mortuary complexes. Likely causes must be sought in their economic support, which was closely linked to the system of domains that belonged to each royal mortuary foundation and the royal residence. The royal mortuary cults were economically supported by a large number of domains founded specifically for the initial construction and long-term maintenance of the funerary complex¹⁰ supporting a sizeable population present at these sites on a permanent and semipermanent basis.¹¹ The political and economic problems and the eventual collapse of the administrative system affected the whole network of royal domains via the royal residence, which had acted as the controlling institution for the flow of goods from the domains to the mortuary complexes.¹² The center of the state administration and the ruling king thus had a direct impact on the supplies and ongoing functioning of the mortuary foundations of the ruler's deceased predecessors. This situation is reflected in the numerous decrees issued by the rulers of the Sixth Dynasty, which had a great impact on smaller communities tied to the royal mortuary foundations, such as at the pyramid towns. It is therefore not surprising that these sites, including the attached settlements, fell apart and were abandoned. Without the support from the state, there seems to have been no incentive or a sufficient economic base for people to stay – not surprising, because most sites are located in the desert zone or on its edge, at a certain distance from the agricultural fields, for example. Those inhabitants who did service on a rotation basis could have simply returned to their permanent settlements within the floodplain. The more permanent inhabitants must have moved elsewhere, probably to the towns and villages of the floodplain that had become economically independent and relied on agriculture and a local administrative system. There is currently no data about how quickly this abandonment occurred and the possibly related population movement that took place.

7.3 MIDDLE EGYPT: THE EVIDENCE FOR SETTLEMENTS DATING TO THE LATE SIXTH DYNASTY AND FIRST INTERMEDIATE PERIOD

In contrast to the evidence from the Memphite region, the archaeological evidence for the Nile Valley, especially in Upper Egypt, shows signs for an increasing, steady growth and enlargement of towns and cities that has been linked to the emergence of powerful families of local elites from the late Old Kingdom onward. These

nomarchs and their families were prominently present also in Middle Egypt, which can be seen from their elaborate rock-cut tombs at sites such as Tehna,¹³ Zawiet Sultan/Zawiet el-Meitin,¹⁴ Beni Hassan,¹⁵ Deir el-Bersha, and el-Sheikh Said,¹⁶ but there is almost no archaeological data about the corresponding nome capitals and larger towns in this region (Figure 5.1). It is possible that they remain deeply buried under thick layers of alluvium or under a modern town, but changes in the river course might also have affected the survival of settlements in the floodplain.

Archaeological evidence for settlement is also lacking for the northern stronghold of the Herakleopolitan rulers of the Ninth/Tenth Dynasties at Herakleopolis Magna near the Fayum entrance (Figure 5.1). Excavations at the site have so far only revealed the existence of an important elite cemetery that can be associated with this town, which must have been situated somewhere nearby.¹⁷

A similar situation exists at the site of el-Ashmunein, demonstrating quite well the problems encountered in Middle Egypt in relation to the evidence for settlements. El-Ashmunein is situated 40 km south of the modern town of Minya and lies in the center of the floodplain close to the Nile. The archaeological site, which is marked by a large tell, is clearly visible here and remains largely free of modern constructions, even though it is closely surrounded by the actual village. No settlement remains of the Old Kingdom or First Intermediate Period have been excavated yet, but the archaeological site is very large, covering about 78 ha and was badly affected by sebkha digging. The archaeological excavations that have been conducted in the past have mainly focused on the Roman town, but evidence for occupational remains dating to the Pharaonic period have been found too.¹⁸ The last fieldwork project at this site, conducted by the British Museum team led by Jeffrey Spencer, found evidence for a First Intermediate Period cemetery here.¹⁹ It is situated about 30 m north of the Amun temple, and the large mud-brick enclosure walls, dating to the Nineteenth Dynasty, change their course in order to avoid cutting through the cemetery. The foundation level of the burials dug here lies higher than the temple floor, which is not surprising, because the levels around the temple grew much faster than the actual stone building.²⁰ The early cemetery, which is characterized by a mud-brick perimeter wall with a width of 1.5 m and was built with a distinctly sloping exterior face,²¹ stands fully in the late Old Kingdom/First Intermediate Period tradition of enclosure wall constructions. The enclosed area has a size

of at least 250 m² and consists of several superimposed levels that lie above the current water table and contain burials spanning the entire First Intermediate Period and into the early Middle Kingdom. Its earliest use might date back as far as the Sixth Dynasty.²²

This cemetery was certainly situated in the immediate vicinity of a major urban center once located at el-Ashmunein, ancient Khemunu, which had been the capital of the fifteenth Upper Egyptian nome.²³ In addition, the cemetery evidence fits well with what is known from other sites such as Elephantine, Edfu, and Dendera (see following sections), which confirm that the presence of a large cemetery close to an important urban settlement is a common phenomenon from the Old Kingdom onward. As Spencer was able to show in his concluding remarks on the town of el-Ashmunein, there are many comparable sites with First Intermediate Period cemeteries in the region of Upper Egypt, but also in the Delta.²⁴ The presence of the cemetery at el-Ashmunein is good evidence for the importance and long-term settlement of Khemunu, including the presence of a population there during the First Intermediate Period.

The two necropoleis, which contain elaborate rock tombs, mainly of the Old Kingdom elite, are situated at Deir el-Bersha and el-Sheikh Said, lying 5 km south of el-Ashmunein (Figure 5.1). Deir el-Bersha also has evidence for First Intermediate Period tombs.²⁵ The tomb inscriptions show that the high officials who resided in the nome capital of Khemunu were buried at el-Bersha instead of el-Sheikh Said.²⁶ The presence of important rock-cut tombs for the highest provincial elite – who in many cases also had close ties to the royal residence during the late Old Kingdom – and the continuity of this cemetery's use during the First Intermediate Period are further evidence for the existence of a large urban center in the region.²⁷

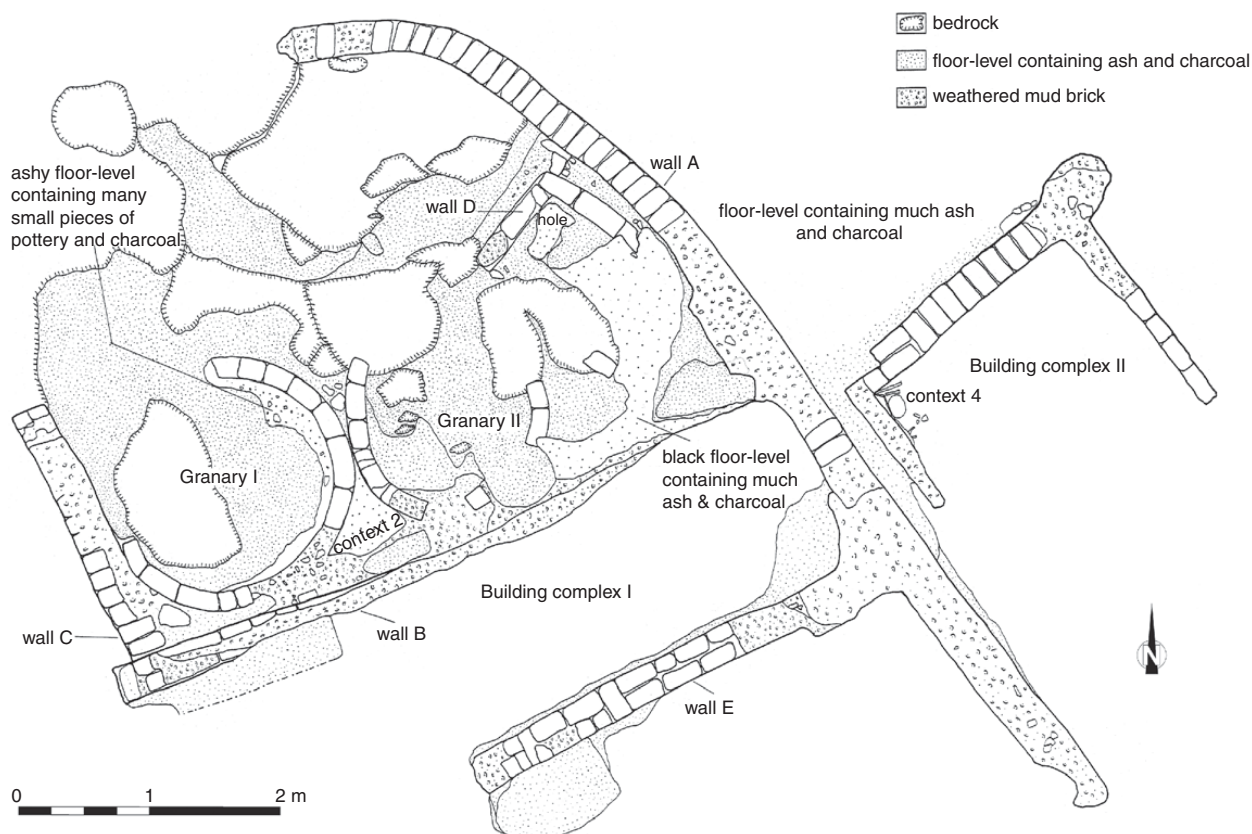
7.3.1 Zawiet Sultan/Zawiet el-Meitin (ancient Hebenu)

The presence of a substantial Old Kingdom settlement in Middle Egypt is indicated by archaeological evidence discovered at the site of Zawiet Sultan/Zawiet el-Meitin near Minya (Figure 5.1). The site of Zawiet Sultan has been identified as the former capital of the Sixteenth Upper Egyptian nome, called Hebenu.²⁸ Decorated rock-cut tombs of the Old Kingdom overlook the settlement area, which is situated close to the desert edge (Figure 7.1). In the sloping desert below the cliffs, a

wider area can be found that contains a multitude of simple shaft tombs, also dating to the Old Kingdom.²⁹ Further toward the floodplain but still along the desert edge lay the ancient town of which only a very few traces remain intact. A much later Roman settlement and intense sebak digging activity left the whole site in a very desolate state, and nowadays it is mainly characterized by heaps of pottery sherds predominantly from the Greco-Roman periods mixed with those dating to the Old Kingdom. In some areas mud-brick walls appear underneath these heaps of rubble and debris. The fieldwork conducted in 1999–2001 by the University of Cambridge in close collaboration with the local Egyptian inspectorate at Minya resulted in the excavation of some Old Kingdom settlement exposures, of which the largest consisted of a small courtyard used for domestic storage installations, apparent from traces of two round silos (Figure 7.2).³⁰ There is almost no information about other buildings, apart from the occasional remains of mud-brick walls and some connected stratigraphy that escaped the destruction by the sebbakhin.³¹ These small exposures of the Old Kingdom town and its related stratigraphic record have provided a sample of pottery sherds that date mainly to the second half of the Old Kingdom, from late Fifth to the Sixth Dynasty.

The location of two of the exposures toward the southern end of the settlement (see Figure 7.1), which contained much Sixth Dynasty ceramics, might be a first indication of the town having expanded in this direction during the late Old Kingdom. The evidence for any First Intermediate Period occupation remains inconclusive. Only a handful of pottery sherds dating to this period were found during the cleaning of the exposures – quite different from the large quantity of late Old Kingdom material.³² In order to draw any conclusion as to the development of the town at the end of the third millennium BCE, a much larger area needs to be explored; this was impossible within the scope of the project. For the moment, it is only possible to tentatively suggest that the oldest settlement remains were somewhere close to the small step pyramid from the late Third/early Fourth Dynasty, which lies about 400 m north of the southernmost Old Kingdom exposures, whereas the southern part of the site is likely part of an expansion of the town.³³

The rise of Beni Hassan, a site situated 30 km to the south of Zawiet Sultan (Figure 5.1) – from the First Intermediate Period/early Middle Kingdom onward – might be an indication for Hebenu losing its prominent



7.2. Plan of the late Old Kingdom storage installations at Zawiet Sultan. After a drawing by the author.

role as provincial capital after the Old Kingdom. All the nomarchs of the sixteenth Upper Egyptian nome were buried at Beni Hassan during the Middle Kingdom, and according to the tomb inscriptions, there seems to have been a larger town in the vicinity that took over as capital during that time.³⁴ The exact location of this town is still unknown, although texts in the tombs frequently mention the names of three toponyms: Neferusi, Menatkhufo, and Herwer. It can only be speculated which of them was the actual nome capital.³⁵ An inscription in the tomb of the nomarch Khnumhotep II mentions a reorganization of the nome by Amenemhat I during the early Middle Kingdom.³⁶ This could have been at the time when Hebenu lost its role to one of the other towns just named. The inscription from the White Chapel of Senwosret I at Karnak still mentions Hebenu as the capital of the sixteenth Upper Egyptian nome, but it is quite plausible that this list is a copy of an older document and did not reflect the actual situation.³⁷ The new location for the tombs of the nomarchs at Beni Hassan and not at Zawiet Sultan is, however, good evidence for a shift in the location of the capital of the sixteenth Upper Egyptian nome.

7.3.2 Conclusions concerning settlements in Middle Egypt

As the examples outlined in the [previous section](#) demonstrate, there is little archaeological data for settlements in Middle Egypt that can be dated to the end of the third millennium BCE, especially for the critical period of transition between the end of the Old Kingdom and the early Middle Kingdom. Only indirect evidence for the existence of larger towns with more-or-less urban character can be deduced from the cemetery evidence and the social rank of the tomb owners. The inscriptions from these tombs provide a good social profile for the elite that inhabited these towns, and their titles often indicate the existence of a major temple at these sites. Also from textual sources we know that these sites functioned as nome capitals during the Old Kingdom and were therefore part of the elaborate administrative network that had been set up by the early Old Kingdom state. In that respect it noteworthy to point out the presence of the small step pyramid at Zawiet Sultan, which is one of the oldest royal markers set up in the provinces at the end of

the Third Dynasty.³⁸ Unfortunately, it is not possible to gain any further insight into the size and complexity of these settlements. Currently only Zawiet Sultan shows some evidence for an expansion of the town during the Sixth Dynasty. The little evidence that was found for the First Intermediate Period settlement and the complete lack of Middle Kingdom material might be an indication for a decline or abandonment in favor of Beni Hassan, but it could also be related to how the archaeological evidence comes to be preserved.

7.4 EVIDENCE FOR SETTLEMENT DEVELOPMENT IN UPPER EGYPT

In comparison with Middle Egypt, the southern part of the country seems to have been much more involved in cultural and political developments, which can be traced back to Predynastic and Early Dynastic times, when this region played an important role for the formation of the early state. The roots of ancient Egyptian kingship and the origins of the early Egyptian state are to be found within Upper Egypt, where the rise of early urban centers such as Hierakonpolis and Elkab, possibly also Elephantine, can be followed from the Predynastic Period onward (see [Chapter 4](#)). There have been hypotheses reflecting on whether the narrower floodplain and smaller flood basins where artificial basin irrigation could have been applied much more easily might have been one of the decisive factors in this development.³⁹

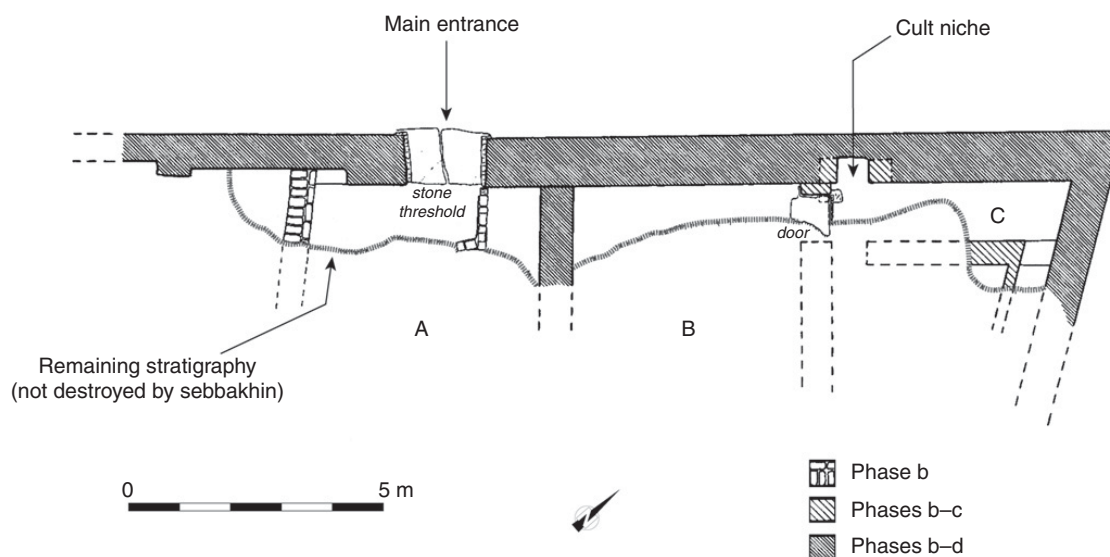
The larger urban centers in Upper Egypt are spread along the Nile Valley from the south of Elephantine island to Abydos in the north, including Kôm Ombo, Tell Edfu, Hierakonpolis, Elkab, Thebes, and Dendera ([Figure 5.1](#)). Even though the level of archaeological exploration and the amount of accessible data is quite different from site to site, a closer look at the various pieces of evidence points to a general trend of expansion and growth of these towns in the south of Egypt during a time that was politically weak and troubled.

7.4.1 Elephantine

Noticeable changes in the settlement patterns at Elephantine occurred during the Sixth Dynasty and the First Intermediate Period. Most of the First Intermediate Period occupation is located in the town area that was already settled during the Old Kingdom on the eastern island, but in several places there are signs for expansion into areas that had not been inhabited before

([Figure 5.31](#)). There is a marked tendency of gradual decline in flood levels during the late Old Kingdom, permitting settling in lower-lying areas of the island.⁴⁰ However, as the archaeological evidence also shows, these attempts to make use of such lower-lying ground for more permanent settlement were not always successful. For example, the depression that separates the eastern and western islands was first used as settlement area during the First Intermediate Period, but these initial attempts were not quite effective, as there is evidence for this area having still been flooded occasionally.⁴¹ Later on, during the early Middle Kingdom, this area was artificially filled up to allow permanent settlement here without the flood risk. Thus, the inhabitants must have been well aware of the danger, but the fact that they nevertheless tried to settle in flood-prone parts of the island might be a sign for the need or desire to expand the town as it was becoming too crowded for its inhabitants. In a similar way, efforts were made to enlarge the settlement toward the northern end of the island. Several test trenches dug in the vicinity of the museum and modern village provide new evidence for a first occupation dating to the First Intermediate Period.⁴² This northern zone of the eastern island lies at 92.7 m above sea level, which is close to the limit of the estimated flood heights.⁴³ During the excavations, many broken pieces of granite were found that had been used as foundations for the mud-brick walls, an effective measure to prevent damage to the foundations of buildings from humidity or water. This also indicates that the builders who erected these houses were well aware of the problem as a consequence of settling in lower-lying areas of the island. These buildings show mainly evidence for domestic use.⁴⁴

An additional glimpse of the First Intermediate Period settlement was discovered under the forecourt of the Ptolemaic temple of Khnum, occupied by well-to-do living quarters during the Fifth Dynasty. These structures resemble in their quality, layout, and size those found, for example, south of the former fortress that date to the Third and early Fourth Dynasties.⁴⁵ It has been observed by the excavators that the domestic structures of the First Intermediate Period are marked by a different division of the interior living space into much smaller room units than before. The construction material for the walls was also markedly different, and instead of uniform and well-laid mud bricks that are characteristic for the Old Kingdom settlement phases, different mud-brick modules were used and some bricks were made of soil mixed with much occupation debris. Thus, there are certain



7.3. Plan of the governor's residence (6th Dynasty) at Elephantine. By G. Marouard, after C. von Pilgrim, "Zur Entwicklung der Verehrungsstätten des Heqaib in Elephantine," in E. Czerny et al., *Timelines. Studies in Honour of Manfred Bietak*, Vol. I, 2006, 179, Abb. 7.

noticeable changes in the living conditions that could be related to different factors, such as a general increase in the number of inhabitants on the island. However, only a larger exposure of this settlement phase would permit drawing any firmer conclusions about this development and the possible factors of influence.

Further evidence for uninterrupted occupation and even the continuous functioning of the local administration can be witnessed by the long-term use and occupation of the governor's residence, which has been excavated at the southeastern part of the island. This also includes a sizeable bakery installation for large-scale bread production serving the gubernatorial residence during the First Intermediate Period and the early Middle Kingdom. No marked interruption in the administrative functioning of this institution can be witnessed from the archaeological record, but, quite the contrary, the local town administration seems to have carried on as usual, as if unaffected by the major political changes in the north of the country.

7.4.2 The governor's residence at Elephantine

About 80 m south of the temple of Satet, the remnants of a major building complex (H2) have been excavated on the eastern part of Elephantine island (Figure 5.31). Sebak digging had destroyed most of this mud-brick building complex apart from a well-preserved western

wall and about 1.3 m of its internal stratigraphy (see Figure 7.3). The importance of this structure was already noted in the 1970s when the German expedition found a doorway lined with decorated wooden panels that resembled a sort of tomb entrance.⁴⁶ After the initial discovery, the archaeological fieldwork in this area was taken up again in 1995 and led to the discovery of what can be called the "governor's residence" at Elephantine.⁴⁷ The size and layout in relation to the associated finds leave no doubt as to it having been a building of major importance. The large entrance, which led into an open courtyard, was situated at the eastern end of one of the main streets of the town leading in a straight line from the fortified gate, through the western part of the ancient town wall, and to this building complex, where the street turns 90 degrees to the north (see Figure 5.31). Thus, this prominent location, recognizable in the street and access pattern within the settlement, is certainly noteworthy and has important implications as to the overall layout of the town.

The western wall of H2 has a width of 1 m and was still preserved to a height of 4 m when excavated (Figures 7.3 and 7.4a). The entrance led into a large open space in the interior, which probably was a courtyard that saw several modifications over time. Von Pilgrim and his team closely investigated the lower occupation levels of H2 in order to find out about the time of this building's initial foundation. The earliest floor levels associated with the



7.4a. Western wall of the governor's residence at Elephantine (view to the north). After D. Raue, "Elephantine: 4500 Jahre an der Südgrenze Ägyptens," in G. Dreyer, D. Polz (eds.), *Begegnung mit der Vergangenheit – 100 Jahre in Ägypten*, 2007, 279, Abb. 397. © Deutsches Archäologisches Institut, Kairo.

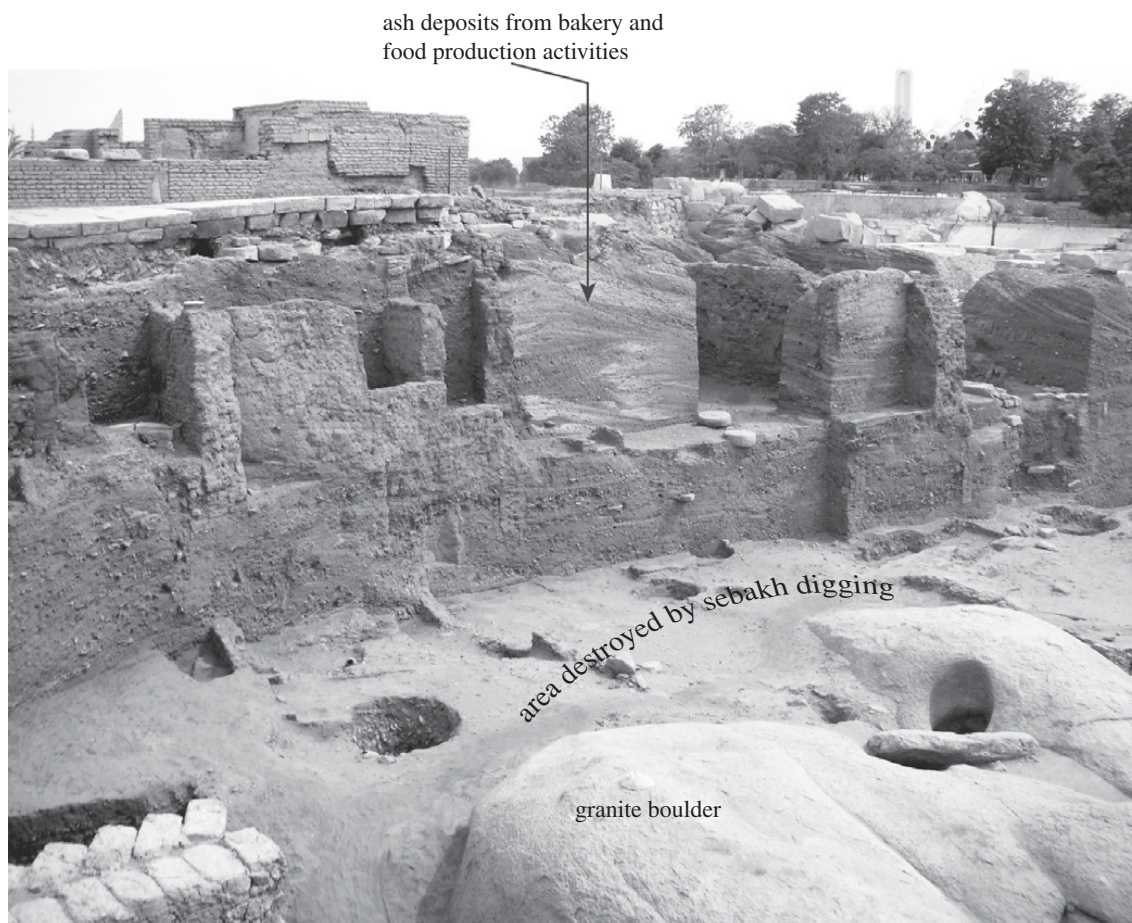


7.4b. Stone threshold marking the main entrance of the governor's residence. After W. Kaiser et al., "Stadt und Tempel von Elephantine, sechster Grabungsbericht," *MDAIK* 32 (1976), Taf. 30a. © Deutsches Archäologisches Institut, Kairo.

walls can be dated to the late Sixth Dynasty and lie 1.5 m below the last floor level on top.⁴⁸ This provides good evidence for this building having remained in use for a very long time, dating back to the late Old Kingdom until the mid-Twelfth Dynasty, when it was finally abandoned. Due to the sebkha destruction, it has been difficult to discover the overall extent of H2: all related occupational remains to the east have been entirely removed by the sebkha, down to the level of the natural bedrock (Figure 7.5). However, immediately at the northwestern corner of H2, a small passageway was detected that leads eastward and connects H2 with another mud-brick compound on its northern side that might have functioned as a production center, according to the large bakery and food production installation found here (see Figures 7.5 and 7.6).⁴⁹ The eastern limit of this adjacent compound can be estimated to have stretched about 30 m eastward, where a small part of an equally thick and well-built mud-brick wall was found that might have been the rear wall to

the northern compound next to H2.⁵⁰ Even though this reconstruction is based on few elements, it is very likely that H2 alone encompassed about 600 m², in addition to the related structures to the north. This would make it the largest building complex on the island – even larger than the temple of Satet, which was the main sanctuary at that time. With this in mind, it comes as no surprise that the finds that have been made in the small strip of occupation levels left intact along the interior of the western wall of H2 were of an exceptional nature and importance.

Several occupational phases were recorded that saw the consecutive installation of smaller internal dividing walls within this courtyard, especially along its northwestern corner (see Figure 7.3). In addition, in the early First Intermediate Period, a small niche was cut into the interior face of the western wall of H2. It had been covered with white plaster and served some cultic activity probably already linked to Heqaib, who was an enigmatic local figure during the Sixth Dynasty and became a saint

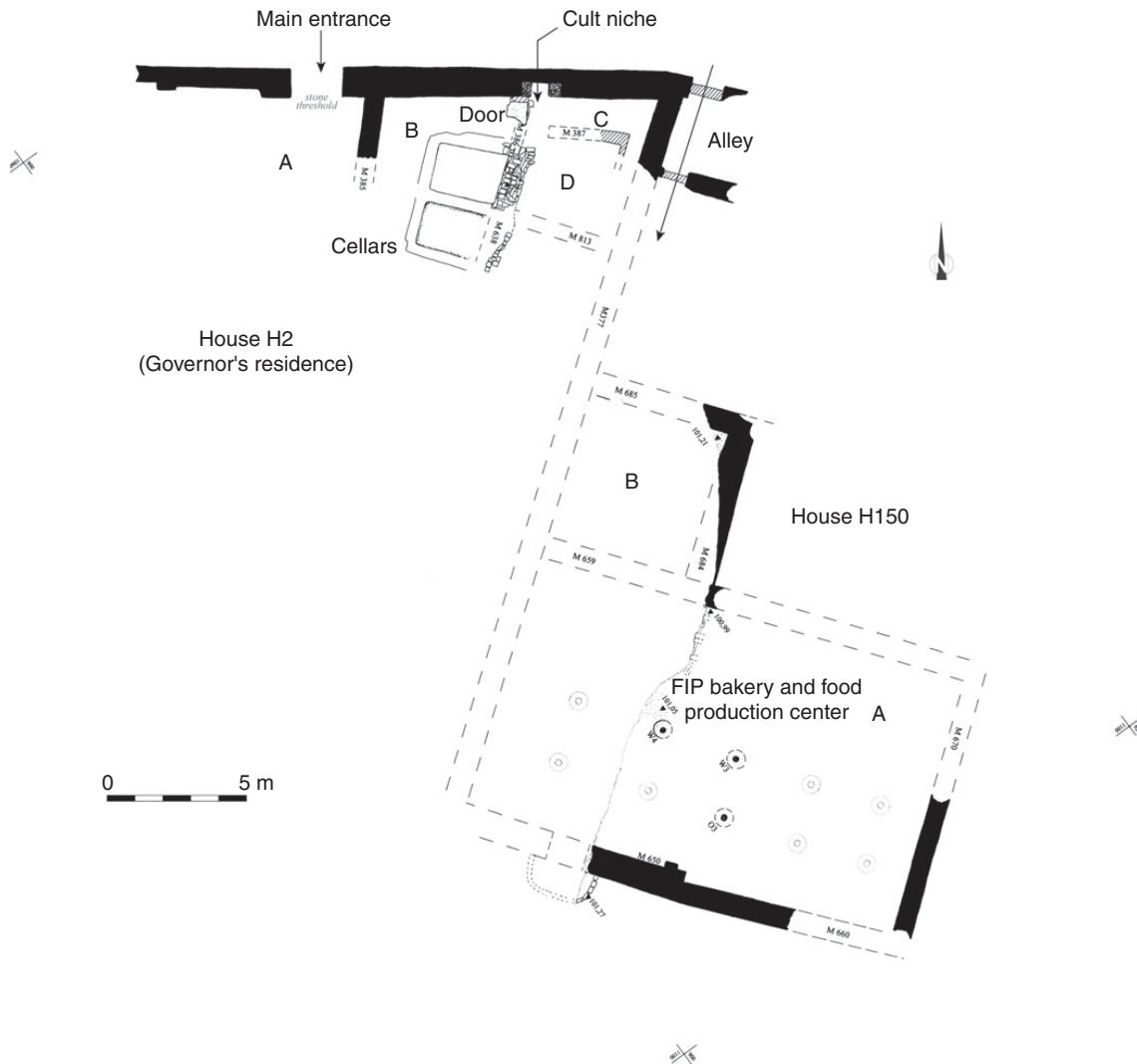


7.5. Barren interior of the governor's residence, which was to a large extent destroyed by the sebbakhin (view to the northeast). Photo by the author, 2005.

after his death.⁵¹ Nevertheless, this was not the principal function of the building, especially during its earlier phases of occupation. And the fact of having a first niche for the veneration of Heqaib indicates a strong connection between him and H2, which probably had been his residence.⁵² The niche is just the first manifestation of a growing cult and the veneration of this local saint, which lasted until the end of the Second Intermediate Period. From the Middle Kingdom onward, a new state-founded sanctuary for his cult and those of later governors was established near the temple of Satet to the north (see [Section 8.4](#)).

Toward the later First Intermediate Period, several mud-brick walls had been added that effectively closed off the niche from the rest of the courtyard. However, it remained accessible through at least two doorways: one on the southern side, which had been closed with a wooden door, and a second one, which provided access

near the northern wall ([Figures 7.7a and b](#)). At this point, the niche was probably no longer in use for an active cult, but instead the newly generated room in the northwest corner of H2 started to be used for the deposition of cult objects that had fallen out of use ([Figures 7.7c–d](#)).⁵³ Two major phases of deposition can be distinguished; they are separated by a thick accumulation of sterile, windblown sand. The first phase contained stone vessels and small, unfinished statues made of different hard stones.⁵⁴ Two alabaster vessels bear inscriptions: one shows the cartouche of King Unas, and the other names Heqaib ([Figure 7.7c](#)). A small diorite weight naming the same king was also found in this context. These larger items were covered by more than 700 pieces of broken clay sealings, of which more than half were stamped by seals. Some of the seal impressions show the name of Pepi II, but the majority were impressed with the typical decorative linear pattern of button seals.⁵⁵ The two oldest

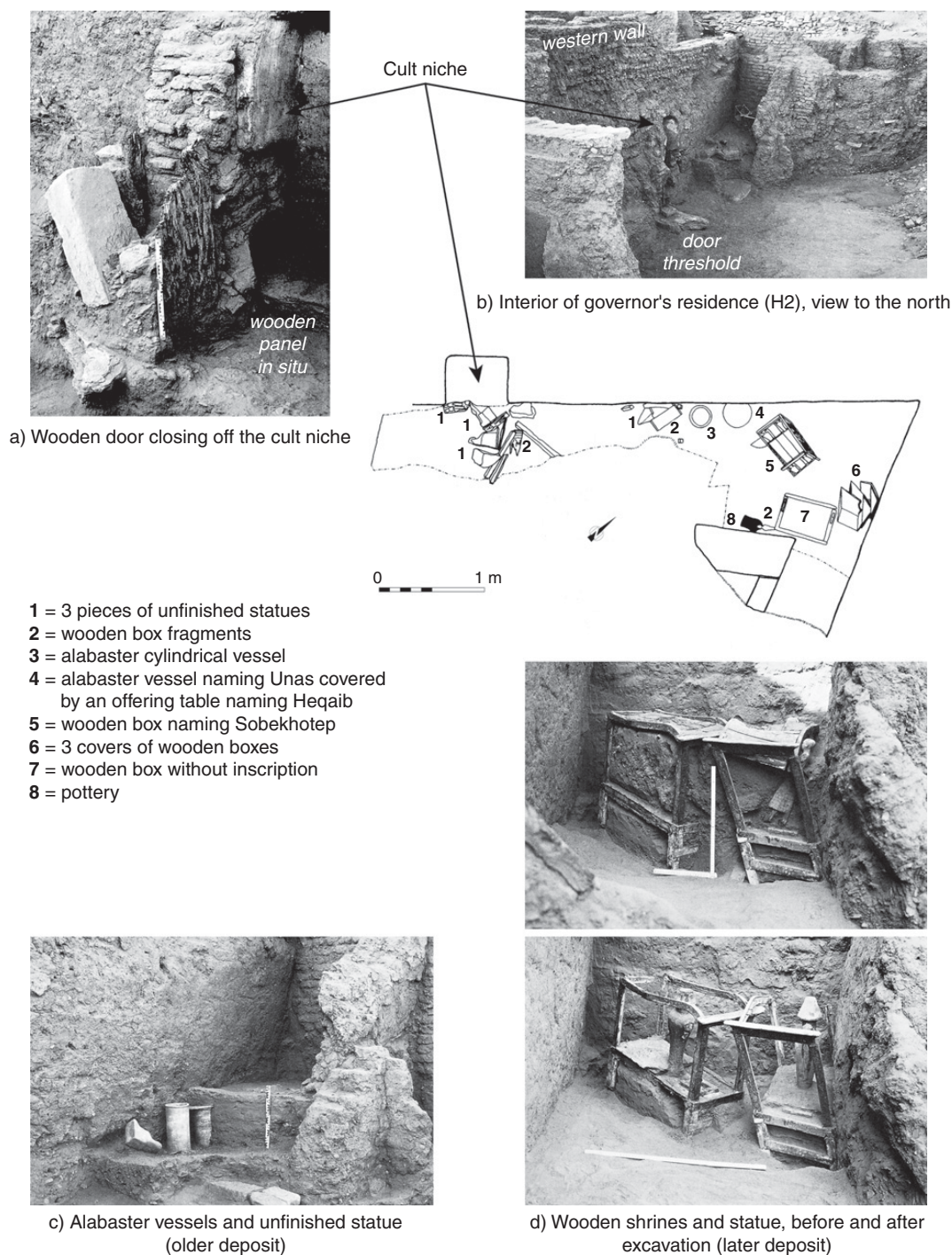


7.6. Plan of the governor's residence (House H2) at Elephantine, from the early First Intermediate Period. By G. Marouard, after D. Raue, in G. Dreyer et al., "Stadt und Tempel von Elephantine, 28./29./30. Grabungsbericht," *MDAIK* 58 (2002), 171, Abb. 4.

objects, dating to the last ruler of the Fifth Dynasty, Unas, are certainly noteworthy and not only confirm a longer history of official buildings in this area but also make one wonder about the existence of an earlier cult, maybe for the *ka* of a governor who anteceded Heqaib. They also demonstrate well the role of heirlooms, which were kept for a considerable number of years before being discarded.⁵⁶ The sealings are also good evidence for administrative activity having taken place in H2, and while it has been suggested that they come from deliveries related to the cult service,⁵⁷ there are several arguments that can be made for H2 having been used for administrative and residential purposes in addition to possible cultic activity.⁵⁸ After the small niche in the western wall – which

probably had been intended for Heqaib – was no longer in use, it is very likely that another place for his worship was created elsewhere in the building complex that is now lost because of seabkh destruction.⁵⁹ This is further confirmed by the second phase of deposition, which also contained cult equipment: two portable wooden shrines naming Heqaib and Sabni are the most spectacular objects among these finds (Figure 7.7d).⁶⁰ The second phase of cult deposits was also covered by discarded clay sealings, this time showing the typical spiral and other decorative motifs made by Middle Kingdom scarabs.⁶¹

These discoveries stimulated much discussion about the role and function of H2, and one can only regret the loss of most of its architecture. Right from the outset



7.7. Deposit of cult objects inside the governor's residence. After Kaiser et al., "Stadt und Tempel von Elephantine, 25./26./27. Grabungsbericht," *MDAIK* 55 (1999), Taf. 19a–d and 20a. Images © Deutsches Archäologisches Institut, Kairo.

of its initial foundation, H2 was certainly the official residence for the local governor of Elephantine. The large mud-brick walls and the prominent location confirm this interpretation. The function also offers a

plausible explanation why a first, small cult for Heqaib was started here and closely linked to the lifetime of this important official. However, some difficulties arise in conjunction with the later evolution of this complex,



7.8. First Intermediate Period decorated wooden panels at the main entrance of the governor's residence (a); detail of the wooden panel (b); and facsimile of the complete scene (c). After Kaiser et al., "Stadt und Tempel von Elephantine, sechster Grabungsbericht," *MDAIK* 32 (1976), 99, Abb. 7, Taf. 30b, 31. Images © Deutsches Archäologisches Institut, Kairo.

especially in relation to the time after the small niche in the northwestern corner of the building had been closed off in order to be used for the deposition of cult

equipment. One hypothesis is that a new cult place, possibly on a larger scale, was built elsewhere within the building. This is a plausible explanation given the

presence of datable cult objects within the deposit that certainly came from somewhere within H2 and that, in accordance with Egyptian ritual practice, could not be disposed of outside the building where they had been used. Nevertheless, this does not exclude the possibility that H2 was still used as a governor's residence at the same time. On the contrary, the evidence from the sealing deposits fits well with the continuation of administrative business inside H2 into the Middle Kingdom; these items cannot really be considered "cult objects," but of course the precise reason they were discarded in this room remains unknown. Was it simply a convenient place to discard trash from sealing activity being carried out in the adjacent courtyard? Von Pilgrim has suggested that the sealings had been used in conjunction with deliveries for the cult and therefore were closely linked to the latter and then discarded in the same place as the other objects. There are no parallels for such matters having played a role at other sites elsewhere. Broken clay sealings were regularly discarded in the vicinity of the administrative building, usually along the exterior of buildings – a common practice from the Old Kingdom onward. It is very likely that the small room in front of the niche served as a convenient place for the disposal of religious items and that it was also used as an easy solution for the discarding of administrative "waste."

Von Pilgrim suggests that from the late First Intermediate Period onward, H2 had lost its function as governor's residence and seat of the local administration and was fully transformed into a sanctuary. The structure was then marked by a decorated entrance with wooden panels that resemble tomb or chapel doorframes and show the owner and related family members performing a cult for the former owner (Figures 7.8a–c).⁶² However, the decorated entrance cannot be taken as conclusive evidence for a complete transformation of the building complex from a residence into a sanctuary, which is equally indicated by the sealing deposits. It is possible, with regard to the large size of H2, that there had been additional entrances so that the one with the decorated wooden doorframe could have been used for a *ka*-sanctuary even while another entrance led to a different part of the building devoted to more "worldly business." Another solution could be that this doorframe simply emphasized the importance of the building within the town as the governor's residence.

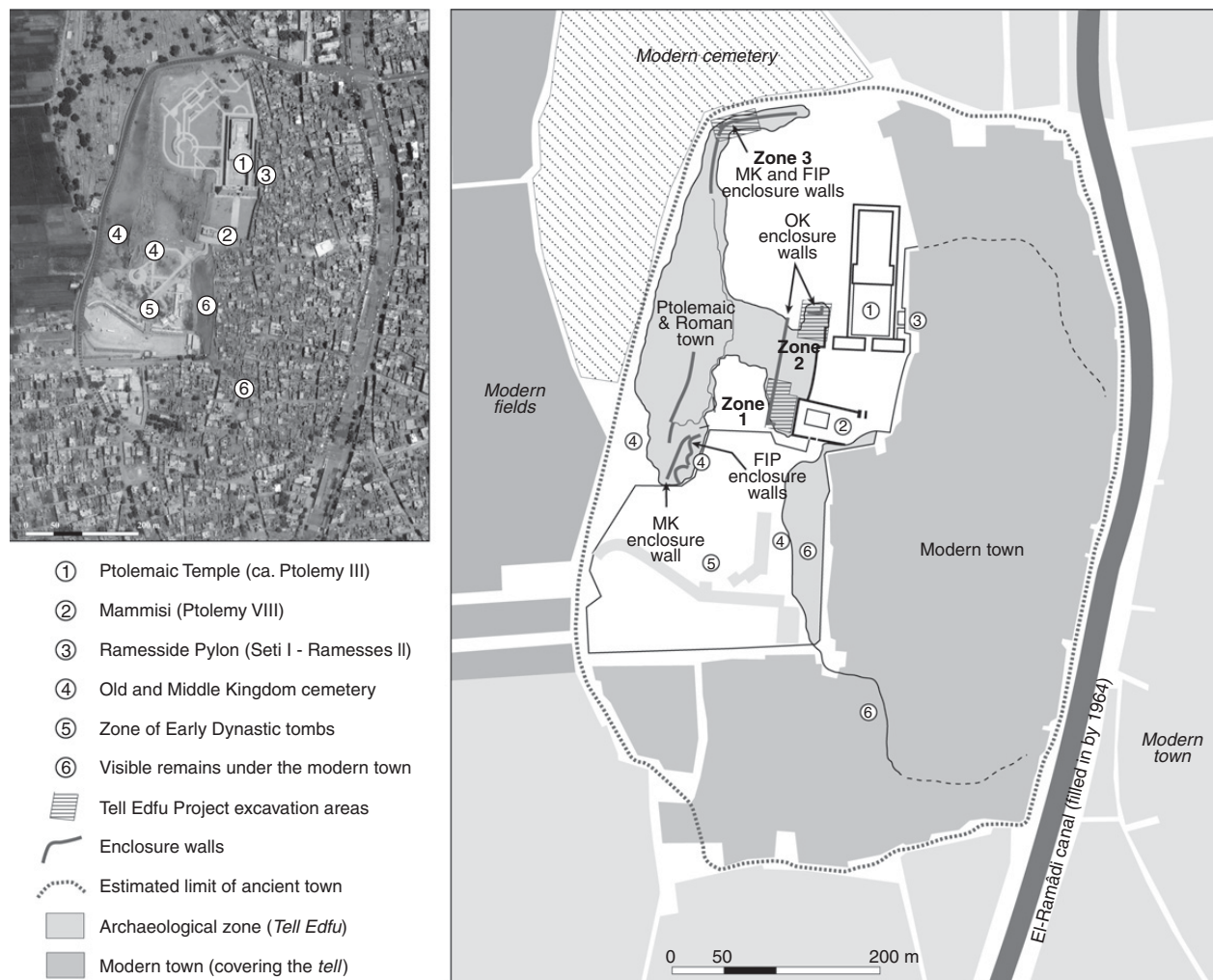
Another point that needs to be raised in conjunction with H2 as governor's residence is the obvious long-term use of certain settlement quarters for specific functions.

There seems to be good evidence for a long tradition of this part of the settlement having been used for official and administrative purposes, which can, for example, be witnessed by the large amounts of discarded sealings naming the early Fourth Dynasty ruler Snofru.⁶³ These were discarded among other objects and waste, such as pottery and large quantities of faunal remains, in addition to tools for making stone vessels. The slope of these trash deposits from the north to the south suggests administrative structures being located somewhere in the vicinity of these deposits and further to the north. There is a possibility that the earlier Third/Fourth Dynasty installations in front of the Early Dynastic fortress⁶⁴ – which have been assigned more official/administrative functions according to their respective layouts and the development of a large stone workshop – were in fact the predecessor installations to H2 and its related production facilities. This would then mean that the latter complex is in fact the result of a southward shift of an older administrative quarter at Elephantine.

The governor's residence at Elephantine not only is an important piece of evidence for the continuation of the administrative system and the presence of governors at the town but also has close parallels to the large palatial complex of the same period that has been excavated at Balat/Ayn Asil in the Dakhla Oasis (see Section 7.5). This complex was found in a much better state of preservation and therefore sheds additional light on the layout and function of such buildings dating to the end of the Old Kingdom and First Intermediate Period.

7.4.3 Tell Edfu

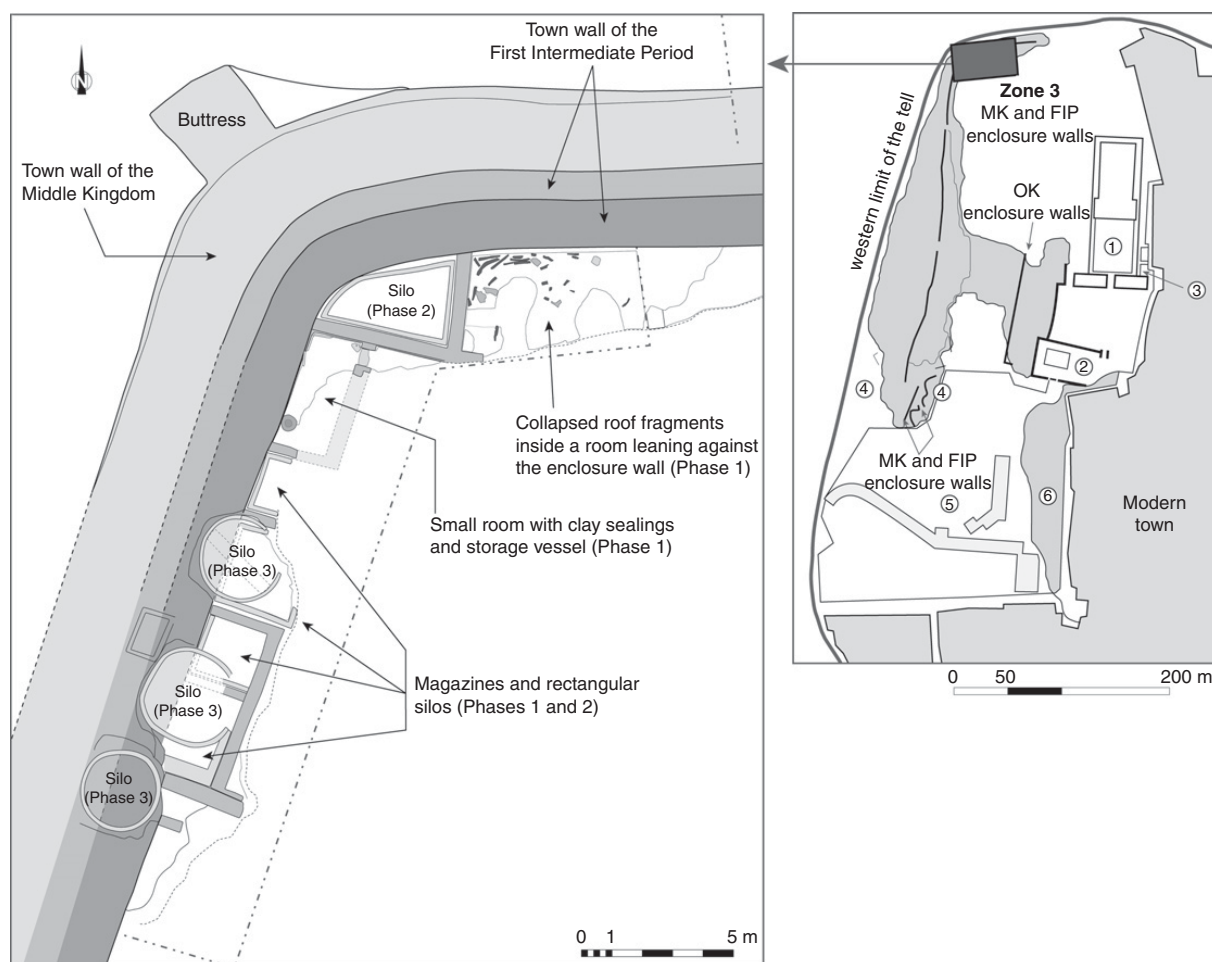
The recent archaeological fieldwork at Tell Edfu, which was once the capital of the second Upper Egyptian nome, has resulted in some new insights into the development of the town from the late Old Kingdom during the early Middle Kingdom.⁶⁵ The recent excavations at the site have revealed that the Old Kingdom settlement had been enclosed by a large town wall, of which the western part, the southwestern corner, and possibly the northwestern angle have been identified (Figure 7.9).⁶⁶ It is currently not possible to provide any precise estimate as to the size of the town in the Old Kingdom, because a large area of it was razed to the ground when the Ptolemaic temple was built. A new excavation area was opened in the fall of 2012 along the northern side of the tell, at a distance of about 200 m from the Old Kingdom town center. There, three large enclosure walls are visible: two made of the



7.9. Satellite view and schematic plan of the Tell Edfu archaeological area. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, © Tell Edfu Project 2011.

same kind of compact small bricks and a third one leaning against the exterior of the second phase, which is characterized by much larger bricks partially covering the top of the earlier two phases (Figure 7.10). Various mud-brick structures, including their floor levels, were to some extent spared by the sebak digging, leaving intact a strip of about 2 m containing settlement remains along the interior of the oldest town wall (Figure 7.10). The principal aim has been to establish a precise chronological sequence for the town walls and the settlement in this area, as it represents a phase of expansion of the ancient town. During the 2014 season, three test trenches were dug below the first phase of the enclosure wall, down to the natural bedrock. The stratigraphic layers that can be associated with the construction phase of the first enclosure in this part of the site contain pottery that belongs to

the repertoire of the end of the Old Kingdom (late/end of the Sixth Dynasty). By the First Intermediate Period and the early Middle Kingdom, several mud-brick structures had been built against the interior of the first phase of the town enclosure that consist mainly of storage installations – predominantly grain silos belonging to at least three different phases of use. The first phase of walls is characterized by rectangular rooms leaning against the interior face of the town wall, which were filled in during a second phase by several small square magazines made of thin walls that had probably been used as silos. That this was the case is indicated by a small deposit of grain found on one of its floors in situ during the 2012 season (Figure 7.12a). The space between the thin walls of the square magazines and the thicker walls of the older rectangular rooms was filled by light gray ash, which was a



7.10. First Intermediate Period town enclosure wall area (Zone 3) at the northern limit of Tell Edfu. By G. Marouard, © Tell Edfu Project 2012.

measure to protect the stored grain from insects and rodents. Remains of two rooms that had not been used for storage were also excavated in this area adjacent to the town wall. In one of them, a deposit of more than forty clay sealings has been found to show negative imprints from both button and scarab seals (Figure 7.12b). The second room had been burnt, and the roof had collapsed directly onto the floor but was still found in a good state of preservation. The excavations revealed a couple of well-preserved, burnt wooden roof beams and smaller pieces of wood as well as fragments of the mud cover from the roofing (Figure 7.10).

During a later phase of occupation, large circular silos were built between the earlier mud-brick structures. Some of them clearly went through the enclosure wall, which means that by this time the earlier phases of the town wall had already fallen out of use. The wall had been

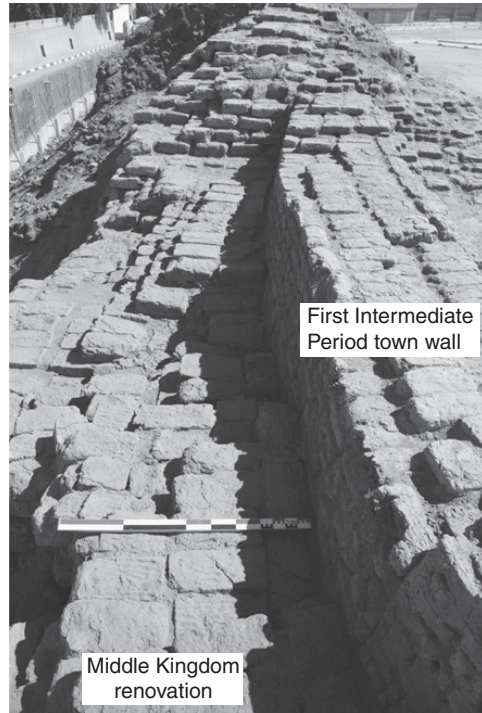
replaced by another thick wall made of larger mud bricks and leaning against and partially covering the top of the older one, with a maximum width of 4 m, which adds up to 6 m in total for both walls (Figures 7.10, 7.11a, and 7.11b). The precise chronology of these different phases that encompass the entire First Intermediate Period and continued into the early Middle Kingdom is still under investigation.⁶⁷ In terms of town planning, however, this new excavation area provides some valuable new evidence even if the full analysis of the precise chronological sequence is still ongoing, depending largely on the pottery evidence and its analysis, which is currently in progress. The first phase of the enclosure wall along the northern side of the ancient tell at Edfu seems to be a response to a significant growth of the settlement that occurred there by the end of the Old Kingdom and had spread in this northerly direction. The presence of pottery



7.11a. First Intermediate Period town enclosure wall at Tell Edfu during the excavations in 2011. Photo by G. Marouard, © Tell Edfu Project 2011.

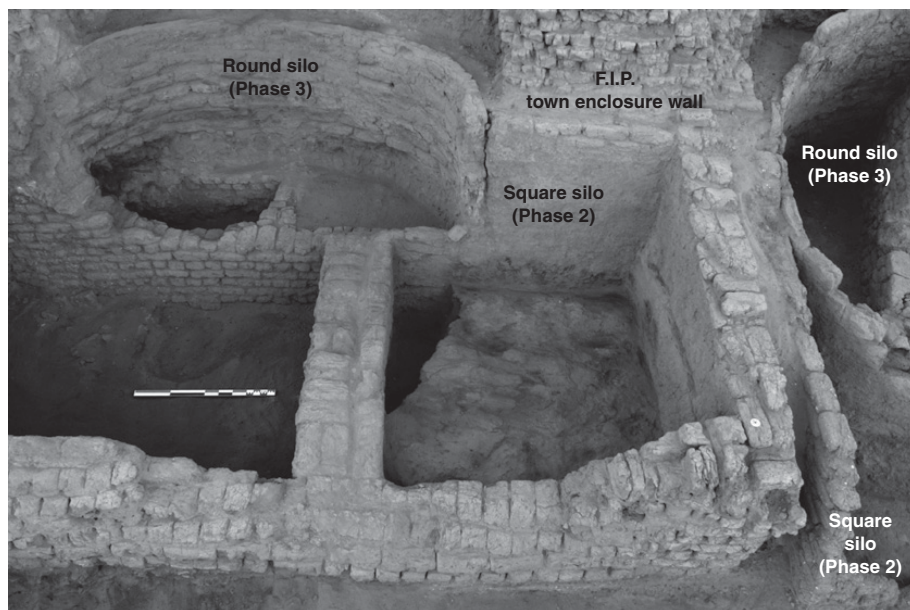
sherds that belong to the late Old Kingdom tradition can be followed in the lowest layers of occupation along the exposed sides of the tell, which had been cut by seabkh digging, showing the entire stratigraphic sequence of the town. There is also good evidence that the town wall was constructed around part of an already-existing ancient town, which seems to have formed an extramural settlement during the later Old Kingdom. The first wall along the northern limits of the site is very well built, using bricks of a small module and reaching a thickness of about 2 m. The recently recovered ceramic evidence suggests a construction date at the very end of the Old Kingdom. During the First Intermediate Period and early Middle Kingdom, the space directly along the interior of this town wall was used for storage installations and administrative activity, as can be witnessed by the discarded clay sealings that might be an indication that this functioned as an official storage area and was not part of a private residential quarter.

Further evidence for early First Intermediate Period town walls was discovered during the French excavations of the cemetery area, which is situated at the southwestern side of the tell (Figure 7.13).⁶⁸ Here a thick wall made of two to three mud-brick layers with sloping sides was noted; it showed some unusual features not encountered elsewhere at the site. This enclosure wall had been built directly above and against the Old Kingdom mastaba superstructures of the cemetery, which were used as the wall's foundations. This resulted in an unusual zigzag course of the enclosure in this part of the site (see Figures 7.9 and 7.13). The reason for this unusual choice

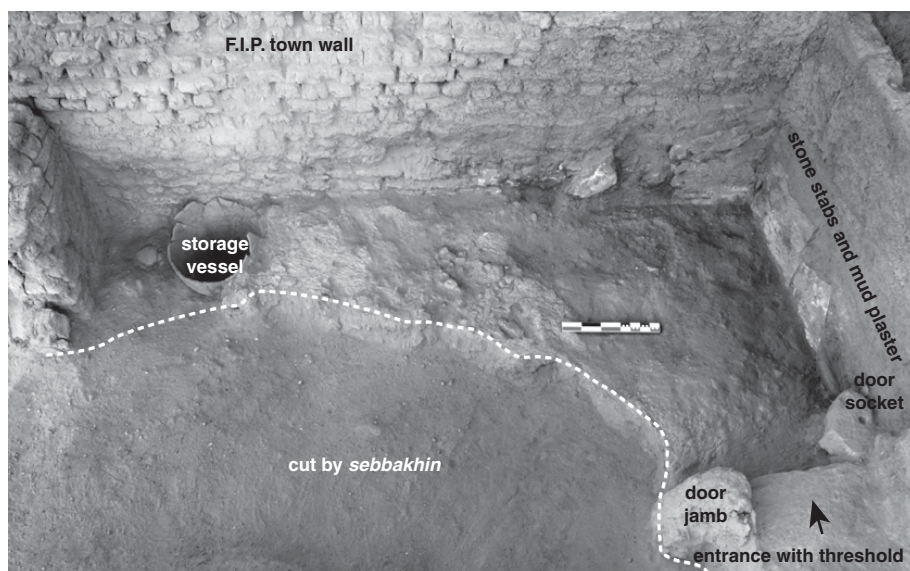


7.11b. Middle Kingdom wall built against the exterior of the First Intermediate Period town enclosure wall. Photo by G. Marouard, © Tell Edfu Project 2011.

of construction is unclear; it might have been deemed an efficient way to build a new enclosure wall quickly or an economic way, by incorporating the older mastaba walls into the new construction. Equally unusual and unexplained is the fact that this new town wall cut the cemetery into halves, one of which was located to the exterior of the town and the other part situated now on its interior. It is also not clear whether those mastabas that were now lying on the inside of the town wall received a different treatment in relation to the upkeep of the mortuary cults. The famous mastaba of Izi, however, remained on the outside of the enclosed town area. After his death some time during the late Sixth Dynasty, Izi's tomb had been turned into an important cult place by the inhabitants of the town, who worshipped him as a local saint and generated cult activity similar to that of Heqaib at Elephantine, which also lasted until the Second Intermediate Period. With regard to the town wall above the Old Kingdom cemetery, this enclosure cannot yet be directly connected to the walls located on the northern side of the tell, and the architectural details are also quite different. However, town walls were probably built in distinct sections and clearly adapted to the local topography.



7.12a. Different phases of storage installations built against the interior of the First Intermediate Period town enclosure wall. Photo by the author, © Tell Edfu Project 2012.



7.12b. Floor remains of a small room used for administrative activities built against the First Intermediate Period enclosure wall. Photo by the author, © Tell Edfu Project 2012.

Thus, there is good evidence for a considerable expansion of the town westward during the First Intermediate Period, and the new wall offered an opportunity to settle safely within this newly enclosed area. Because the local topography of Edfu was much less restrictive than that of Elephantine, it seems that the western and northern parts

had already been used for habitation from the late Old Kingdom onward. The town of Edfu had started to develop into a larger urban center by that time, probably constituting the largest settlement within the region up to the town of Elkab, which is situated about 30 km to the north of Edfu and belongs to the third Upper Egyptian nome.⁶⁹



7.13. First Intermediate Period enclosure wall built above the late Old Kingdom cemetery, south of Tell Edfu. Photo by the author, © Tell Edfu Project 2010.

Furthermore, it is noteworthy that the late Old Kingdom town walls, which are nowadays situated close to the Ptolemaic temple, saw a last wall addition on their exterior face during the First Intermediate Period. The addition was founded on a much higher level in comparison with the earlier walls (see [Figure 7.14](#)). This means that by the time the new town enclosure was built along the northern limits of the tell, the older town walls still had some function – maybe even forming a kind of “inner-walled citadel” that could have protected important buildings, the local temple, and much of the town’s wealth and assets.⁷⁰

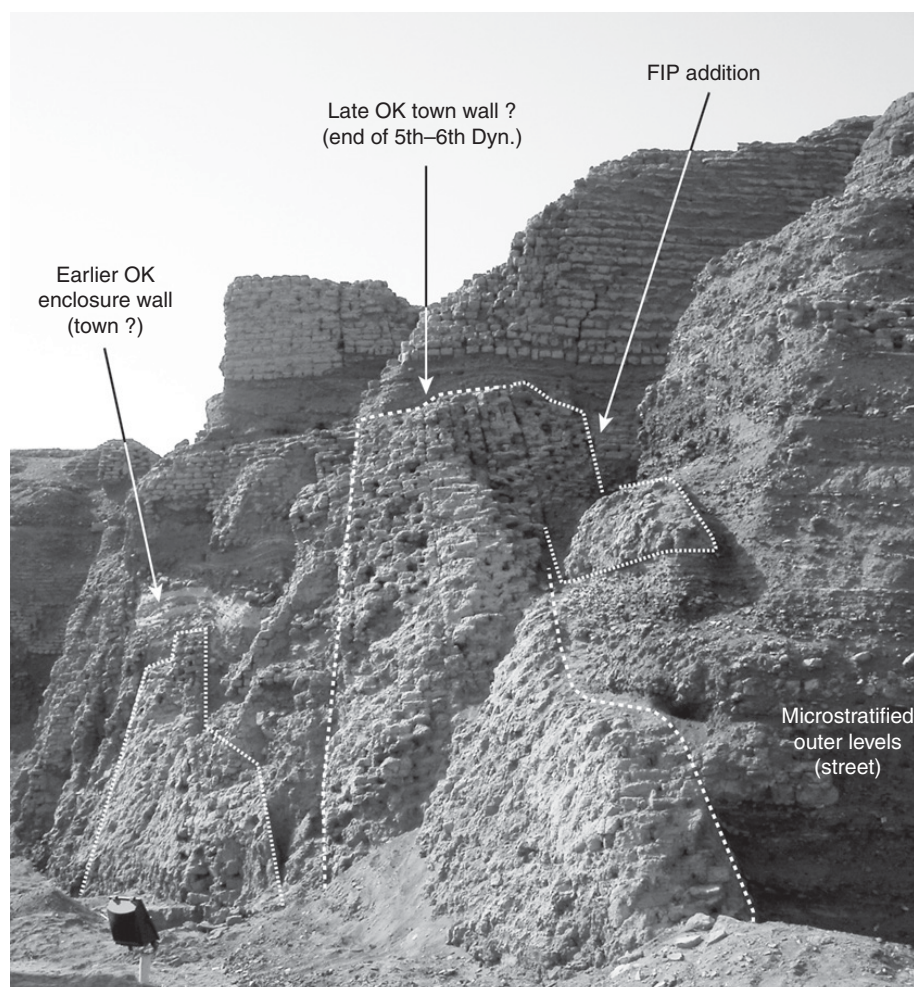
This overall development of the town of Edfu during the late third millennium BCE, as far as it can be reconstructed up to now by the archaeological evidence, indicates the existence of a large and possibly flourishing provincial urban center from the late Old Kingdom onward. The inscriptions from the Old Kingdom cemetery confirm the presence of an important local elite at the site, with nomarchs having had close connections to the royal court and indicating the existence of an important temple.⁷¹ The need to enclose the newly developed extramural town along the western and northern areas sometime during the First Intermediate Period might have been a reaction to local conflicts that had reached the Edfu region. This is, for example, implied in the inscriptions of the tomb of Ankhtifi from Mo’alla, a site 80 km to the north of Edfu, but any concrete archaeological evidence for these conflicts is missing so far.⁷²

7.4.4 Kôm Omb and Elkab

Admittedly little evidence is available from two important tell sites that were once important regional centers as far as textual sources tell us. One of these towns was situated at Kôm Ombo, situated about 70 km to the south of Edfu, and the other at Elkab, which lies to the north ([Figure 5.1](#)). From the sparse settlement remains that are still visible at these two sites today, it is evident that a larger town once existed here, in the form of an impressive tell comparable to the one at Edfu.

At Kôm Ombo, the remnants of the ancient town are clearly visible behind the Ptolemaic temple, but large areas of it have been cut away by sebak digging and later constructions ([Figure 7.15](#)).⁷³ Kemp observed several early walls to the northwestern side of the temple enclosure wall, one resembling closely an early enclosure wall made of at least two inclined layers of mud bricks ([Figure 7.15](#)).⁷⁴ The pottery, which he collected during a short survey season in this area, shows typical forms of the late Old Kingdom and First Intermediate Period. From the distribution of various early settlement exposures on the ground, Kemp deduced that the town had probably reached its maximum size by the end of the third millennium BCE, with a size of around 3 ha.⁷⁵

Early settlement remains at Elkab are much less well preserved due to extensive sebak digging that removed



7.14. Different phases of Old Kingdom town wall remains and First Intermediate Period addition (Zone 2). Photo by the author, © Tell Edfu Project 2012.

the ancient tell almost entirely (Figure 7.16). Here too, remains of two early town walls, also called “double walls,” were found, showing the same architectural feature of inclined layers being built against each other.⁷⁶ According to several carbon-14 dates, which have been obtained from these walls in addition to the related ceramic evidence, the “double walls” date to the Old Kingdom and First Intermediate Period.⁷⁷ Little else is known from this period of the town’s occupation. The excavation of earlier Old Kingdom settlement remains has been taken up recently by a Belgian mission led by Dirk Huyge, near the western side of the site and close to the later “Great Wall.”⁷⁸

7.4.5 Karnak

The site of Karnak, which is situated on the east bank of the river, at the heart of the modern town of Luxor, is

currently known for its monumental temples, which cover most periods from the Middle Kingdom onward (Figure 8.38). Nowadays, mainly the stone structures are visible, but from several archaeological test trenches and limited excavation areas, it has become clear that in its earliest phases Karnak Temple was surrounded by a large town.⁷⁹

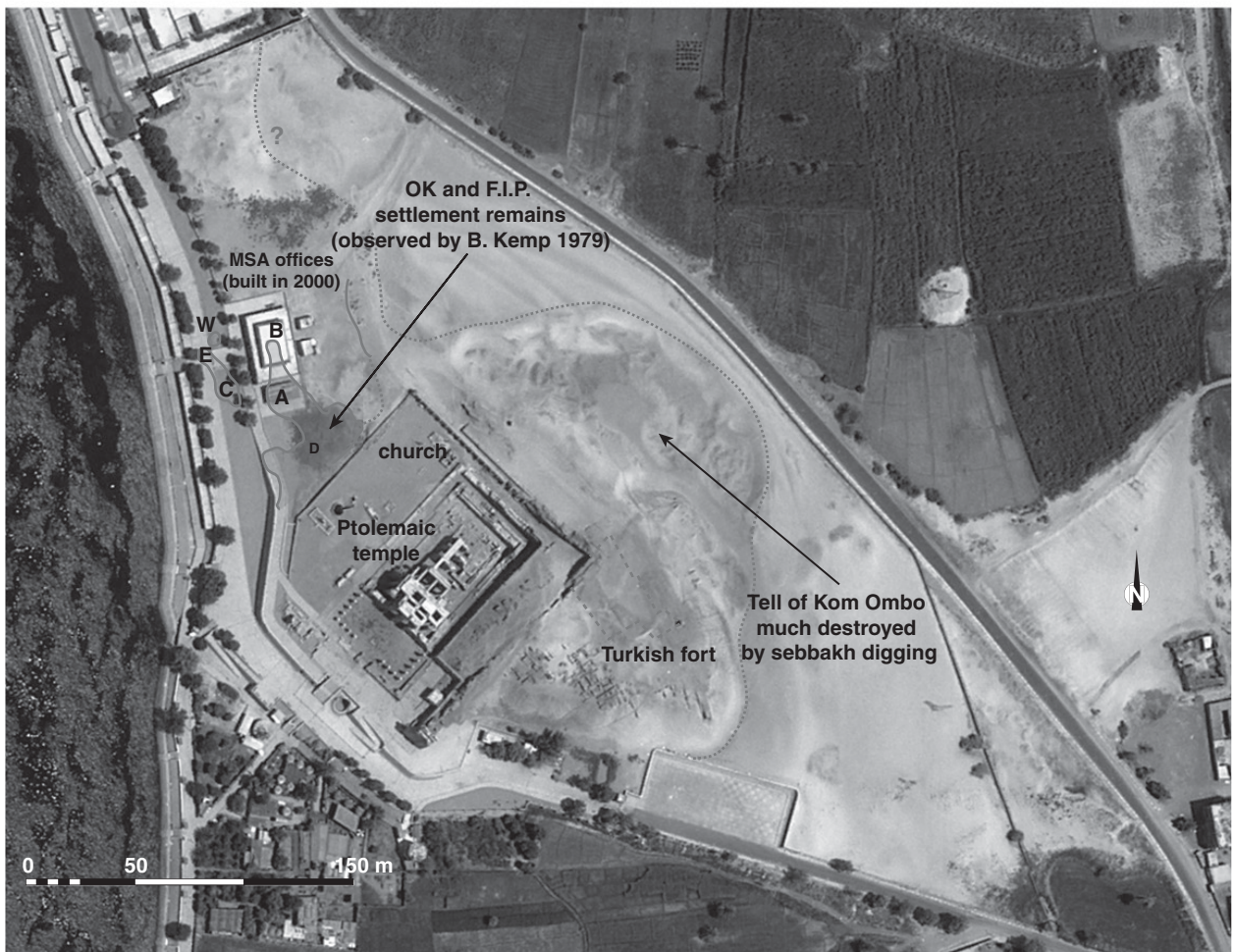
There are only two areas so far that have provided evidence for First Intermediate Period settlement remains. One of the excavation areas lies south of the Sacred Lake (Figure 8.38, no. 7),⁸⁰ and the other area is situated farther to the east, where the Osiris tombs have been found (Figure 8.38, no. 6).⁸¹ These two areas only provide small windows into the pre-Middle Kingdom settlement activity at Karnak, but if indeed there were continuous traces of occupation connecting these two areas – which lie about 300 m apart from each other – it



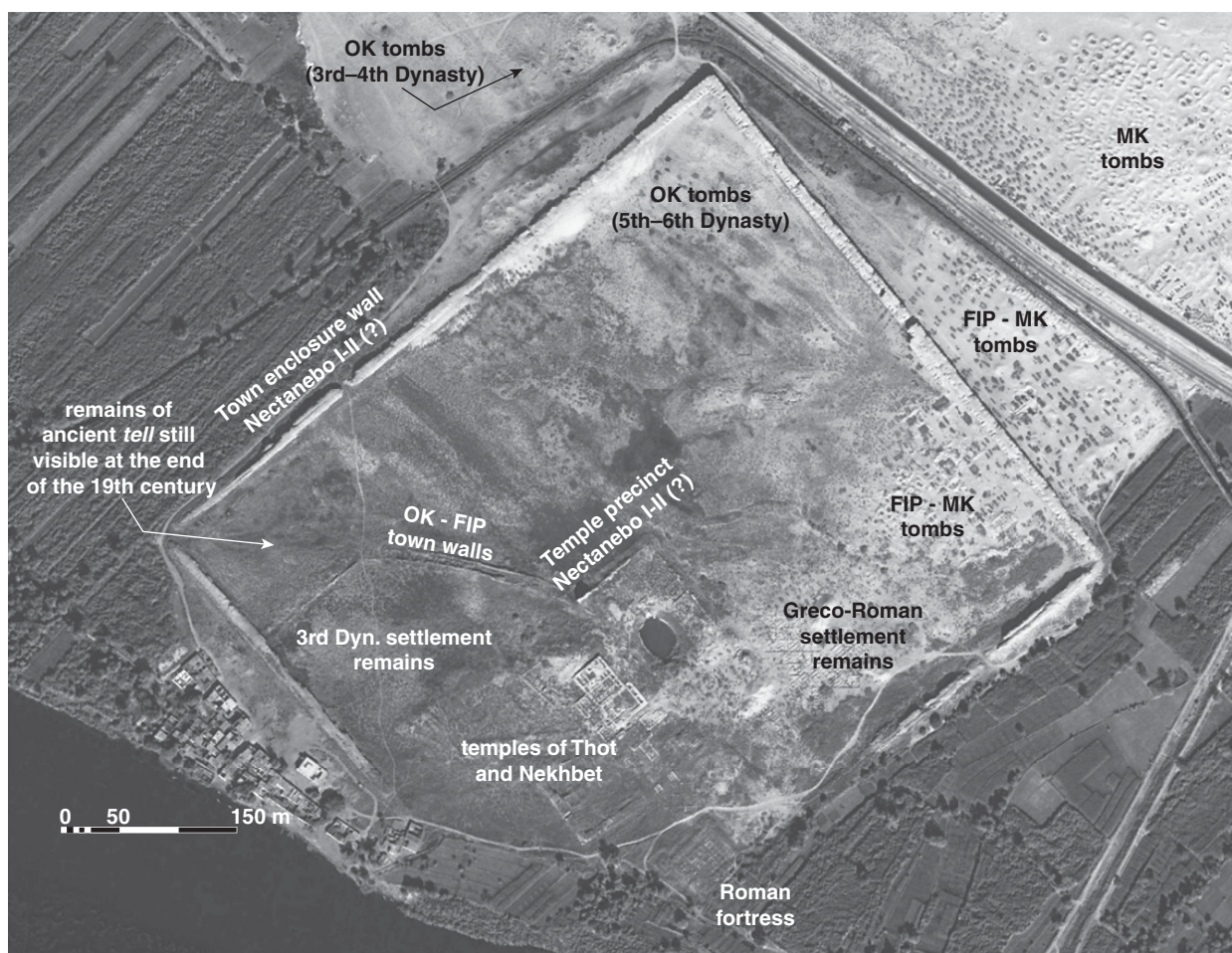
Wall A



OK and F.I.P. settlement remains (observed by B. Kemp in 1979)



7.15. Satellite view of Kôm Ombo archaeological area (2010) with location of the Old Kingdom and First Intermediate Period settlement remains. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after B. J. Kemp, “Kom Ombo: Evidence for an Early Town,” in M. J. Mukhtar, P. Posener Krieger (eds.), *Mélanges Gamal Eddin Mokhtar*, BdE 97, Vol. 2, 1985, pls. IIa, b. Courtesy of B. J. Kemp.



7.16. Satellite view of El Kab archaeological area (2010). By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after S. Hendrickx et al., “The Walls of El Kab,” in M. Bietak et al., *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 157, fig. 10.

would have formed a rather large settlement already at this early time. The two excavation areas also lie in clear alignment to each other, being situated to the east of the temple and the Sacred Lake (see Figure 8.38).

No traces dating to the Old Kingdom are known, even though some tombs of this period were found on the Theban West Bank together with First Intermediate Period and early Middle Kingdom burials.⁸² The earliest evidence for a temple at Karnak dates to the late First Intermediate Period, of which an octagonal sandstone column with an inscription of Antef II was found during the cleaning operations along the sides of the Middle Kingdom courtyard of the Amun temple.⁸³

The numerous areas where early settlement remains have appeared in different parts of Karnak under later temple constructions show that there is much evidence for a large urban agglomeration during the Middle

Kingdom and Second Intermediate Period, surrounding the temple complex.⁸⁴ Karnak temple in its current state shows numerous building phases in one place, and the large enclosed area of the Amun precinct reflects the later stages of this temple complex without much evidence for the contemporary city. This current appearance is quite misleading when dealing with the earlier periods, because once a major city stood in the vicinity of the then much-smaller temple. Important national monuments such as the sacred precinct at Karnak were never isolated from a corresponding settlement, especially during the second millennium BCE, when the temple had been of reduced size in comparison with its later development. As the current evidence stands, it is during the First Intermediate Period that the temple and settlement of Karnak become traceable for the first time in the archaeological record.

7.4.6 Dendera

New evidence for a large settlement has been found during a survey, followed by three seasons of excavations, in the area to the east of the Ptolemaic temple at Dendera, a site that is situated at about 60 km north of Luxor (Figure 5.1). Similar to Edfu, a major provincial center developed here by the late Old Kingdom, with the status of nome capital of the sixth Upper Egyptian nome. The temple in its current state presents the last phase of a continuous development in temple construction at the site.⁸⁵ As has already been demonstrated with regard to the other towns discussed in this chapter, these temples never constituted isolated structures but were usually part of an urban agglomeration.

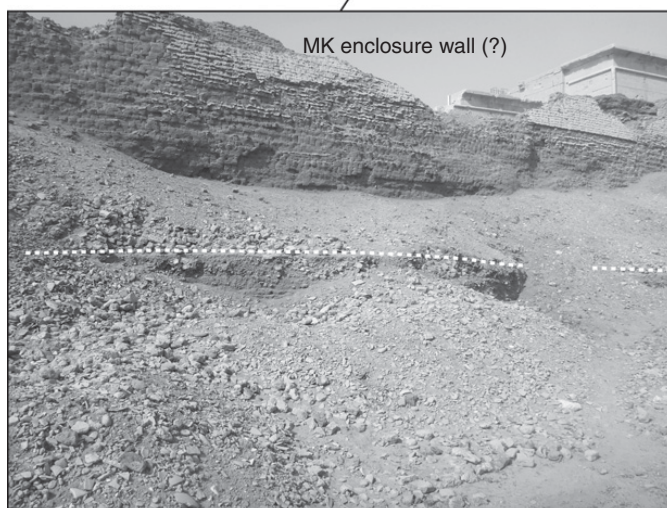
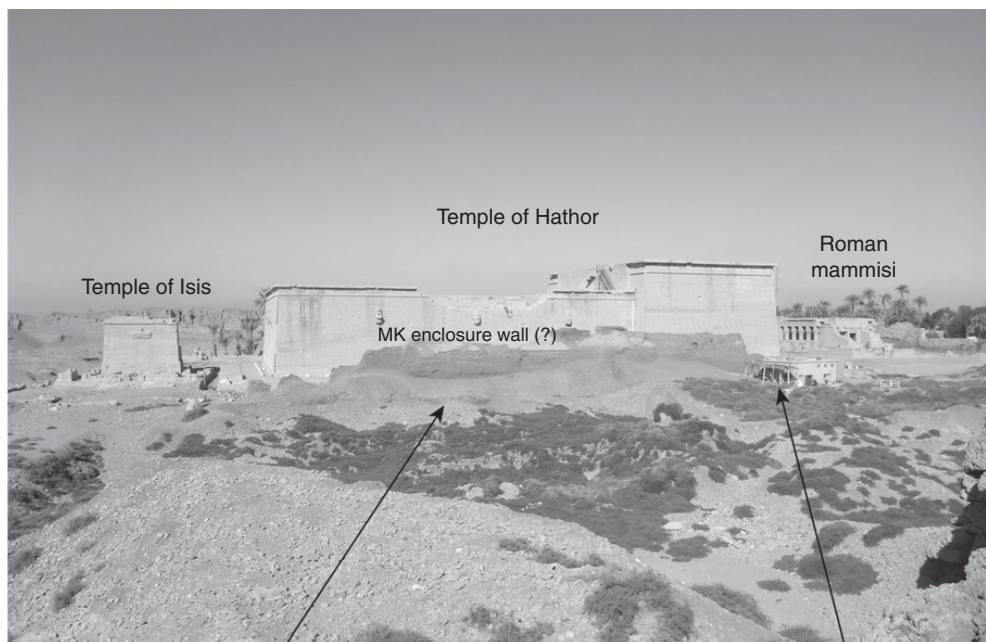
Dendera was also seriously affected by sebak digging, which gradually reduced the once-elevated tell into a relatively flat area that nowadays is marked by a large sherd scatter on the surface. Remnants of the once-prominent tell can still be seen along the interior of the temple enclosure and are especially visible on the eastern side of the temple proper, where the tell had still stood quite high up to relatively recent times – as can be seen on photographs and images from the eighteenth and nineteenth centuries.⁸⁶ During construction work in the late 1970s within the temple precinct, Barry Kemp carried out a brief survey in this area and noted a considerable quantity of Old Kingdom pottery sherds to the eastern side of the main temple building (Figure 7.17).⁸⁷ The destruction of the mound by the sebbakhin has been considerable, but it is nevertheless evident that part of the ancient city once stood here. To the western side of the temple, against the interior of the large mud-brick enclosure wall, a surface collection of pottery had been made between the remains of later mud-brick walls, but only some residual pottery sherds dating to the Old and Middle Kingdoms were found here.⁸⁸ This clearly shows that the oldest traces of the ancient settlement are located on the eastern side of the current temple complex and developed farther in that direction, toward the low desert (Figure 7.18).

The area to the east of the massive mud-brick temple enclosure wall is characterized today by a relatively flat desert zone overgrown with halfa grass and covered by a large quantity of pottery sherds. In recent years, Sylvie Marchand, together with Damien Laisney, conducted a survey, followed by several seasons of excavations under the direction of François Leclère, which resulted in the rather unexpected discovery of the First Intermediate

Period town beneath a few centimeters of sand and topsoil in this area.⁸⁹ It can now be confirmed that the ancient town stretched more than 300 m to the east from the temple, an area that seems to have been flattened by sebak digging, although it remains questionable whether the ancient town ever formed a high tell site here.⁹⁰ Situated parallel to it and further south lies a large cemetery with tombs encompassing the entire Old Kingdom and First Intermediate Periods. A large number of mud-brick mastaba tombs belonging to the local elite of Dendera have been excavated here (Figure 7.18).⁹¹

Thus, this settlement formation – including the important cemetery for the local population, which was situated close to the actual townsite – compares well with other provincial towns in Upper Egypt. As far as the preservation of the ancient town at Dendera is concerned, the sebak digging stopped just above the level of the First Intermediate Period. Beneath a relatively thin layer of sand and rubble, the first occupations layers can be encountered, dating to the earlier Middle Kingdom.⁹² This phase has been much affected by the holes and pits dug during the sebak removal. However, the underlying First Intermediate Period occupation remained relatively intact and offers a unique opportunity to explore a settlement of this time period for which stratified settlement data is almost non-existent in other sites in the Nile Valley, with the exception of Elephantine and Tell Edfu.

The three seasons of excavations at Dendera focused on a building complex and production area, including a bakery that is situated toward the eastern end of the settlement.⁹³ The excavated building complex consists of a larger compound with a residential core unit in the center, surrounded by outbuildings and production areas that include a garden area characterized by small square plots lying next to each other (Figures 7.19 and 7.20). The final limits of this building complex were not reached during the excavations, apart from the western wall that stood next to a street, but the entire excavation area measured only 20 m by 24 m. The internal arrangement of the rooms still shows many elements of the Old Kingdom tradition, with corridors leading from the entrance into smaller interior rooms that show evidence for multiple activities. A group of rooms in the center of the building forms the core unit that resembles the typical house layouts of the Old Kingdom and certainly belongs to the same cultural-architectural tradition (Figure 7.19). The bakery part was attached to the complex's south-western side.



Sebakh-quarry face with OK layers in situ



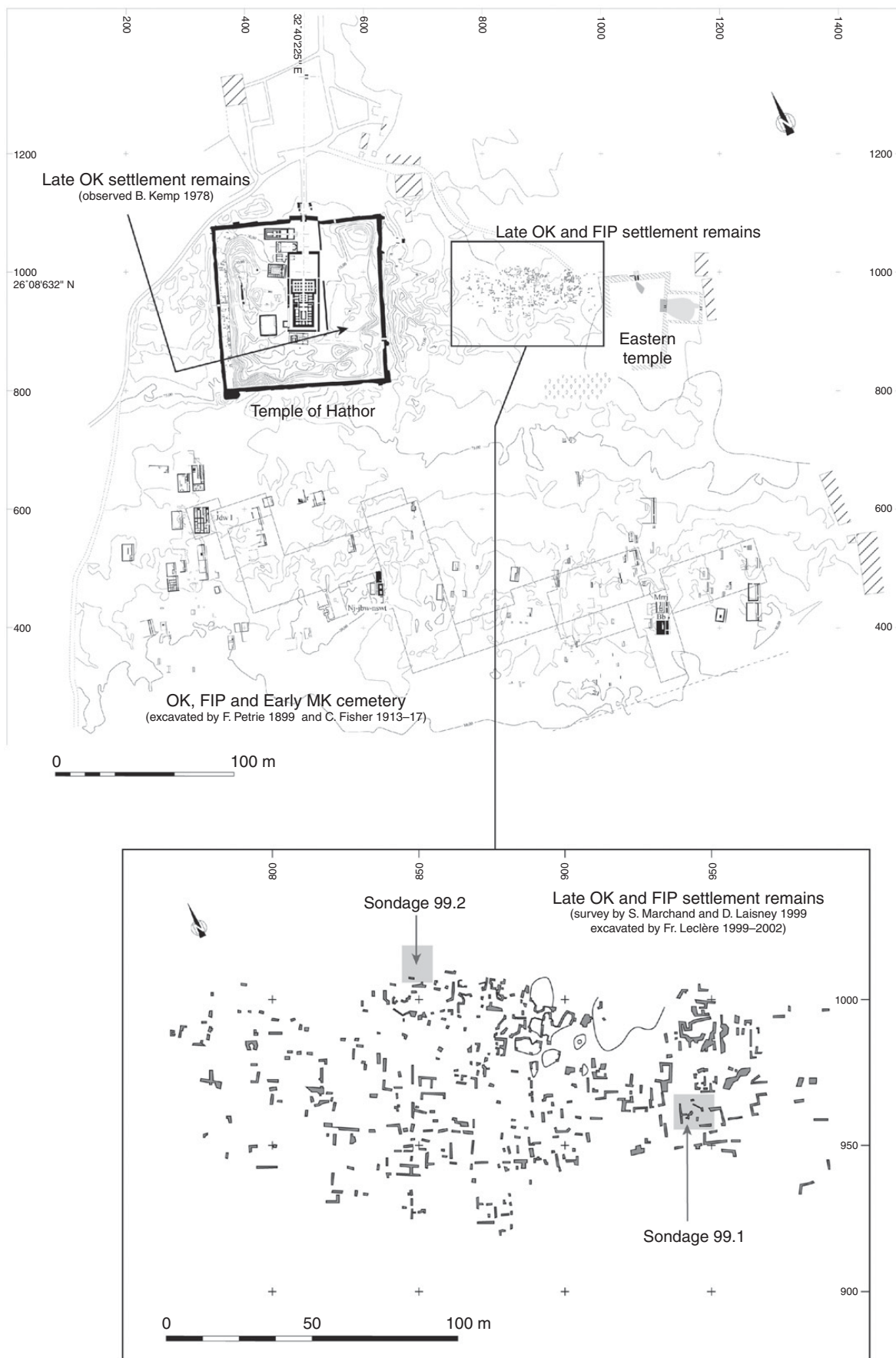
Foundations of the electric station showing the *Sebakh-quarry face* and the *OK layers in situ*

7.17. Views of the intramural area of the temple of Hathor at Dendera showing the location of the Old Kingdom and First Intermediate Period settlement remains. Photos by G. Marouard, and after B. J. Kemp, “The Location of the Early Town at Dendera,” *MDAIK* 41 (1985), Taf. 21a. Courtesy of B. J. Kemp.

The earliest wall remains in this settlement area date to the late Sixth Dynasty and were founded directly on the natural bedrock.⁹⁴ This is a strong indication that this part of the ancient town was in fact a major expansion eastward and probably comprises the maximum limit of the town ever reached.⁹⁵ By taking into account the traces of the late Old Kingdom settlement along the eastern side of the Ptolemaic temple itself, as well as the area outside the

mud-brick temple enclosure wall and the limits of the cemetery to the south, it is possible to estimate the total size of the ancient town of Dendera during the First Intermediate Period at about 7.5 ha.

The study of textual sources from Dendera provides further clues to the identities of the town’s officials, confirming the results of the archaeological evidence for the existence of an important urban center by the



7.18. Plan of Dendera with an enlargement of the settlement area east of the temple of Hathor. By G. Marouard, after P. Zignani, D. Laisney, "Cartographie de Dendara, remarques sur l'urbanisme du site," *BIFAO* 101 (2001), 416, fig. 1, and S. Marchand, "Fouilles récentes dans la zone urbaine de Dendara: La céramique de la fin de l'Ancien Empire au début de la XIIe Dynastie," *CCE* 7 (2004), pl. II.



7.19. Schematic plan of a First Intermediate Period domestic unit (Sondage 1) in the urban area at Dendera. By G. Marouard and F. Leclère, after S. Marchand, “Dendara,” in R. Schiestl, A. Seiler (eds.), *Handbook of the Pottery of the Egyptian Middle Kingdom*, Vienna 2012, 176, fig. 3. © F. Leclère.



7.20. View of the First Intermediate Period urban area east of the Hathor sanctuary enclosure wall at Dendera. Photo by G. Marouard (2013).

end of the Old Kingdom.⁹⁶ From the Sixth Dynasty to the end of the Old Kingdom, the highest officials at Dendera held the title of “Overseer of Upper Egypt.” Administrative changes occurred during the First Intermediate Period, but this does not seem to have had a negative effect on the town – at least for what is visible in the archaeological record. The use of the cemetery continued without interruption, and the recent excavation of a small area within the settlement shows an unbroken sequence of settlement and occupation between the late Old Kingdom and the early Middle Kingdom.

7.4.7 Abydos

Recent excavations at the settlement site of Abydos (Kôm es-Sultan) have led to the discovery of parts of the Old Kingdom and First Intermediate Period settlement too.⁹⁷ Abydos lies within the eighth Upper Egyptian nome and functioned in antiquity as a religious center that reached importance on a national level at least by the Middle Kingdom, while the actual nome capital was situated at Thinis (Figure 5.1).⁹⁸ The archaeological traces of a major town can be seen at Kôm es-Sultan, where occupational remains form part of a larger mound or tell.⁹⁹ Today there is not much of the original tell preserved because of sebak digging, which has seriously affected this settlement site as it has others. Abydos’ main significance lies in its role of being a religious center dedicated to the gods Khentimentiu and Osiris.¹⁰⁰ The earliest traces of the town, which seem to have been marked by a scatter of villages during the Predynastic Period, were replaced by a single large settlement surrounded by a mud-brick enclosure wall by the early Old Kingdom.¹⁰¹

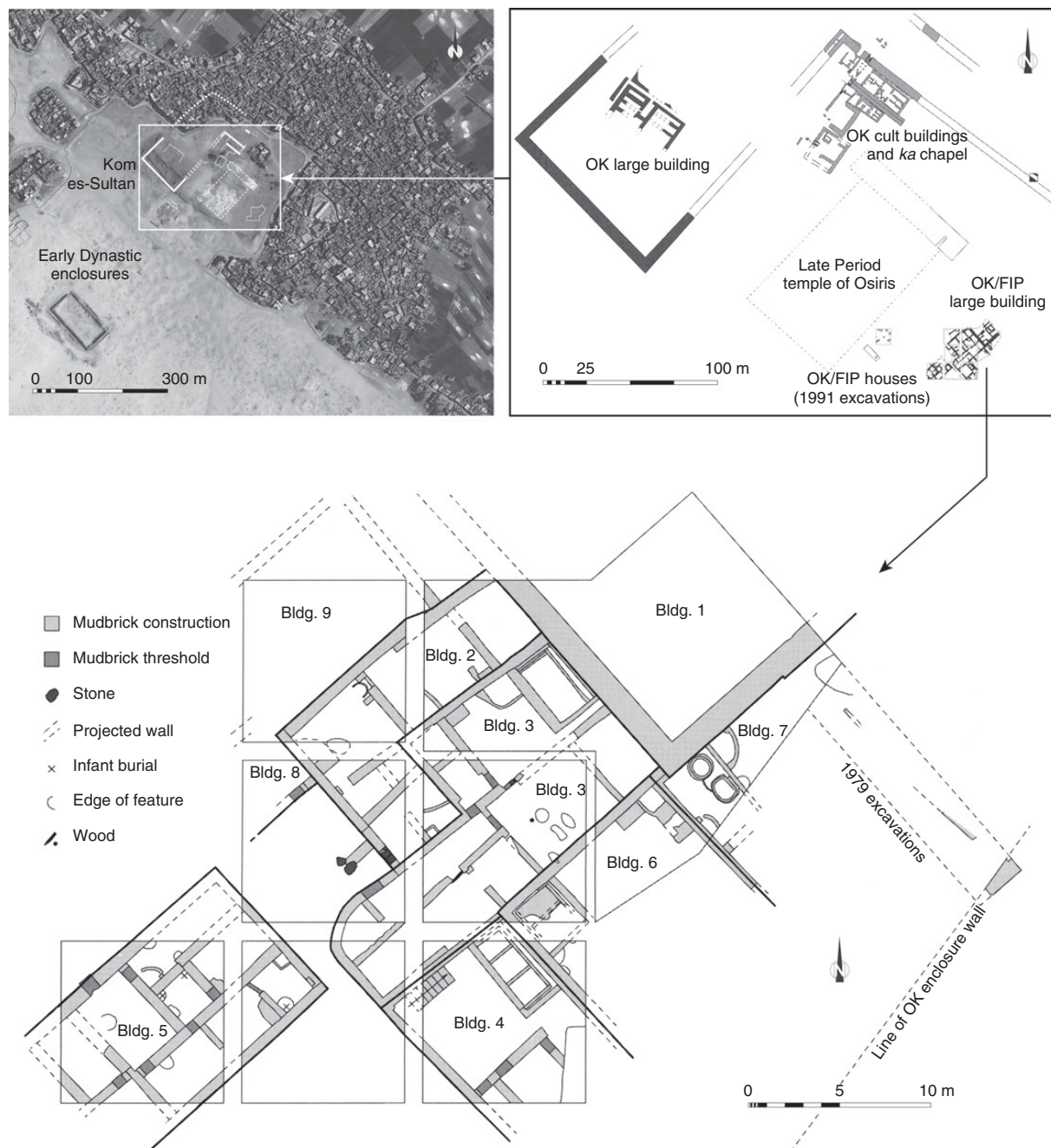
In the late 1970s, a new project was started at Abydos, with the objective of investigating the ancient Egyptian settlement at Kôm es-Sultan.¹⁰² After several test excavations, carried out under the direction of David O’Connor, the project was continued in 1991 and 1992, during which time a larger area in the south of the settlement was excavated by Matthew Adams (Figure 7.21). Immediately underneath the pitted surface left by the sebbakhin, traces of the early Middle Kingdom settlement were found. The better-preserved settlement layers beneath it date to the First Intermediate Period and the late Old Kingdom, which is comparable to Dendera.¹⁰³ The excavated remains are mainly of domestic character and consist of about ten houses that are built next to each other in the typical agglutinated way, sharing common walls and being consecutive additions

to mud-brick structures already present (Figure 7.21). For example, Building 2 was built directly against the western exterior wall of Building 3 in an L-shape layout, adapting to the contours of the latter. Similarly, Buildings 3 and 4 were added against the southern and western sides of Building 6, which might be one of the oldest buildings in this area.

The individual houses or units can only be separated according to the entrances from the exterior street level (see Figure 7.21). Four of the buildings (2–3 and 6–7) make use of a thick mud-brick wall of a larger building complex (Building 1) as a rear wall. The function of Building 1 is not known, because none of its interior has been excavated. The general orientation of this settlement quarter follows the same orientation as Building 1, which is the largest complex in this area.

The best-preserved occupation phase is Level Ia/b, which dates from the end of the Sixth Dynasty/early First Intermediate Period to the early Middle Kingdom. For the Old Kingdom level, Level II (late Old Kingdom, Dynasty 6), only a few wall remains have been found, showing that this area was extensively leveled in order to construct the new buildings that remained in use until the early Twelfth Dynasty.¹⁰⁴ The wall remains of the older Level II show a different alignment and are much thinner in comparison with the walls of the later occupation levels.¹⁰⁵ Thus, the new phase of occupation marks a distinct break in the settlement here. Adams, who was in charge of the excavations of this town quarter, suggests that until the second half of the Old Kingdom, this part of the town had been a marginal area settled only with more substantial buildings when the ancient town expanded sometime during the end of the Sixth Dynasty/early First Intermediate Period. During the earlier Old Kingdom, layers of pink ash indicate a faience production site here (Level III).¹⁰⁶

The occupation of Level I reveals a new spatial organization over the entire excavation area that lasted for a period of about 100 years and only shows little changes in the general layout of the individual buildings. In some of them there is evidence for storage installations such as silos and square magazine-like compartments – especially visible in Building 6, which also contained a large courtyard in front of these storage facilities (Figure 7.21). Not all buildings had such storage installations, which might be a sign for a closely connected community or neighborhood sharing a certain number of facilities.¹⁰⁷ From the published plans, it is not always evident how to make out the individual house units. It is also hard to estimate, even by focusing on the main entrances to each unit, to what



7.21. Plan of the Old Kingdom and First Intermediate Period settlement remains at Abydos (a) and plan of the First Intermediate Period buildings, Level Ia/b, of the settlement site at Kôm es-Sultan (b). By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and (a) after D. O'Connor, *Abydos: Egypt's First Pharaohs and the Cult of Osiris*, London/New York 2009, 81, fig. 36; (b) after M. D. Adams, "Household Silos, Granary Models, and Domestic Economy in Ancient Egypt," in Z. Hawass, J. E. Richards (eds.), *The Archaeology and of Ancient Egypt: Essays in Honor of David B. O'Connor*, Vol. 1, Cairo 2007, 2, fig. 1. Courtesy of D. O'Connor and M. D. Adams.

extent the inhabitants constituted larger households sharing and living in several of these buildings, forming an extended family structure. As it is described in the

Heqanakht papyri, the household and family members Heqanakht addresses in his letters include about fifteen persons.¹⁰⁸ Furthermore, evidence for broken clay

sealings discovered in all the various buildings of Phase I are good evidence for the continued functioning of the local administrative system and economic institutions.¹⁰⁹ The sealings show a range of the usual geometric motifs of the First Intermediate Period to early Middle Kingdom types. The impressions left on these sealings were made mainly by oval stamp seals and very small scarab seals. Few of them also show the round shape reminiscent of button seals.¹¹⁰ However, the little repetition in sealing motifs is striking and certainly indicates more-or-less individual transactions and deliveries instead of the presence of a local or national administrative institution that would have generated many more sealings with repetitive motifs when opening and sealing commodities or doors.¹¹¹ Adams proposes to see this as evidence for these households being relatively independent of institutional supplies, and because this settlement quarter is domestic and not official in character, this could be a plausible conclusion.¹¹² It would also be possible to interpret the sealing finds at Abydos as evidence for individual transactions carried out by the inhabitants on an occasional basis. It might also be a sign that private transactions were carried out as part of a local economic system that functioned within the larger town of Abydos during a period of political decentralization.

In this respect, another observation can be made. During the excavations, special attention was paid to the occurrence of imported goods and raw materials in order to evaluate the existence of trade networks and their role during a period when the central government seems to have been weaker than usual and textual sources indicate interregional conflicts. The access to nonlocal materials has always been an issue in this respect. Adams found two kinds of raw materials that are certainly not local and had to be imported from different parts of Egypt. One is quartzite, which had been used predominantly for grinding stones in the settlement and which was found in considerable quantities in the various buildings described previously, indicating household food production. The second raw material that occurred is hematite, which was used as pigment. Quartzite has its origins in two regions in Egypt: there are quarries in the Aswan region as well as in the north near Heliopolis, while hematite can be found also at Aswan and at the oasis of Bahariya in the Western Desert.¹¹³ The lack of evidence for workshops at Abydos using this type of stone to manufacture, for example, stone vessels, stelae, and statues excludes to some extent a possible reuse of quartzite for grinding stones.¹¹⁴ The presence of these two raw materials at Abydos could be a

sign for a certain amount of quarrying and mining activities still being carried out during the First Intermediate Period and into the early Middle Kingdom outside the context of expeditions organized by the state, as a local initiative.¹¹⁵

The newly acquired evidence for the First Intermediate Period settlement at Abydos fits well with what has been seen at other sites in Upper Egypt. The stratigraphic record shows that the settlement had expanded into the southern and more marginal part of Kôm es-Sultan by the end of the Old Kingdom. Furthermore, it is important to note the continuity in the layout, spatial organization, and use of this domestic quarter, which seems to have been established after a major break marked by a leveling operation in this area of the town. Further evidence for an expansion of the settlement during this period was found in the north-eastern part of the site. A large enclosure wall, which can be considered an extension of the earlier one, was built during this time. It went out of use by the Middle Kingdom.¹¹⁶

There is also no evidence for any economic collapse that would have seriously affected the inhabitants at Abydos. It seems that administration and economic interactions continued on a local level, but there is also some evidence for links to interregional trade networks. Although the Old Kingdom state put much emphasis on sending expeditions to obtain raw materials along important trade routes, there might have been a more locally organized system on a smaller scale than the former state-sponsored expeditions that functioned parallel to the latter but is not mentioned, for example, in textual records.¹¹⁷

7.5 EVIDENCE FOR FIRST INTERMEDIATE PERIOD ACTIVITY AT AYN ASIL/BALAT IN THE DAKHLA OASIS

The fieldwork by the French Archaeological Institute (IFAO) at the settlement of Ayn Asil in the Dakhla Oasis has provided new evidence for the occupational history of the site from the late Old Kingdom up to the end of the First Intermediate Period and continuing into the early Middle Kingdom.¹¹⁸ Excavations concerning the First Intermediate Period have mainly focused on the palatial complex occupying the southern part of the site, which provides good evidence for continuous occupation despite a major conflagration that affected most of the complex at the end of the Sixth Dynasty (Figure 5.42). Furthermore, the pottery workshop, which is situated to the western side

of the palace, also shows evidence for the continuous production without any major interruption.¹¹⁹

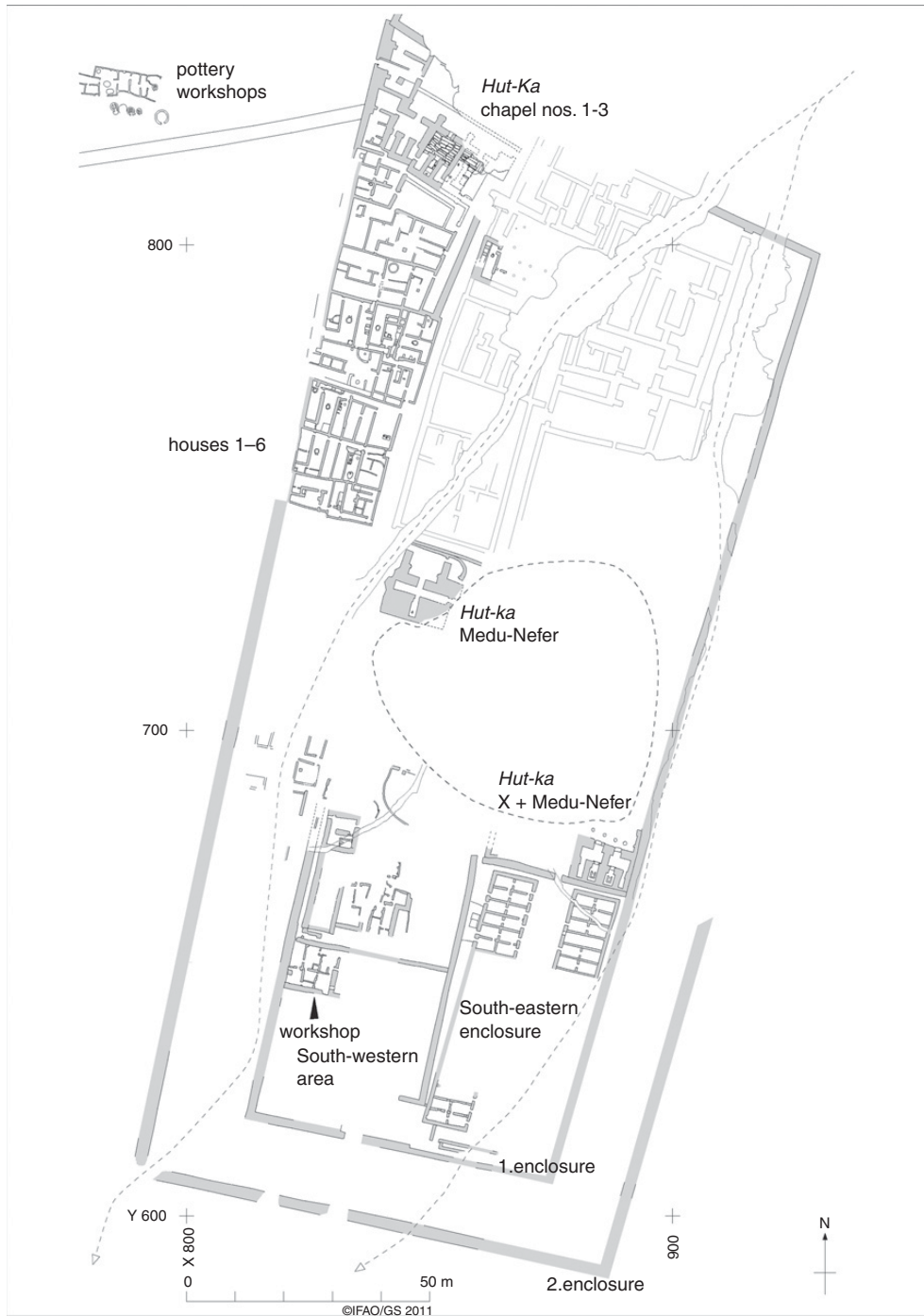
The palatial complex consists of a western half marked by several *ka*-chapels and production areas immediately to their south as well as an eastern portion that included the main part of the palace with its residential apartments, open courtyards, and magazine installations (Figure 5.42). A large open zone lies farther south in the central part of the palace and divides it into a northern and southern half. Although the northern portion had been used by three generations of governors during the late Old Kingdom, it was not reoccupied after the fire. Any newly constructed residential and administrative areas dating to the First Intermediate Period are still missing in the archaeological record and might have been located elsewhere and were probably on a smaller scale than the late Old Kingdom structures.¹²⁰

Two of the three *ka*-chapels on the western side of the palace saw a revival of the cult, but on a markedly reduced scale than before. The sanctuary of Medu-Nefer, situated to south of the large magazine structure, was already built in Phase I but continued to function in the First Intermediate Period.¹²¹ Furthermore, the fact that a new double *ka*-chapel was erected during Phase II that postdates the conflagration in the southeastern part of the palace seems to confirm that the same family of governors reoccupied the palace after its partial destruction (Figure 7.22).¹²² At the same time, the outbuildings linked to the *ka*-chapels on the western side of the palatial complex were transformed from food production facilities to mud-brick buildings used for domestic purposes. This indicates that the overall function in this part of the complex had changed, which fits well with the evidence for a reduced cult activity at the older *ka*-chapels.¹²³ However, on the southeastern side of the palatial complex, a new double *ka*-chapel was erected during the First Intermediate Period (Figure 7.22), supporting the notion that there was no principal change in the function and use of the gubernatorial complex at that time.¹²⁴

Most of the structures dating to the postconflagration phases have been excavated in the southern portion of the site, which was occupied by several workshops and production areas, including a magazine complex. In total, the excavator has identified two phases of reoccupation (Phases II and III) after the fire. Phase II has been dated to the First Intermediate Period up to the early Eleventh Dynasty, and Phase III dates to the early Middle Kingdom (end of Eleventh–early Twelfth Dynasty).¹²⁵ The southern portion of the palatial complex is divided into an eastern and a western area by a thick mud-brick wall

(M 2197; see Figure 7.22). The function of each area is quite different. Earlier structures in the western half, which had been contemporary to the late Old Kingdom occupation of the palace, were leveled and completely rebuilt, containing smaller units used as production areas and workshops including evidence for bakeries. The large complex in the southeast of the southern half containing the two rows of identical rooms separated by an elongated open court in its center continued to function and was now mainly used for habitation (Figure 7.22).¹²⁶ Those two zones in the southern half of the complex seem to have been spared by the conflagration, which affected most of the palace at the end of the Sixth Dynasty. The final phase of occupation (Phase III) before the ultimate abandonment is marked by another series of small rooms and installations that occupy the western half, while the eastern part was left open, without any new installations.¹²⁷

The workshop area situated in the western part of the southern half of the governor's palace has been excavated and studied in much detail, providing an interesting insight into the multifunctionality of such a production site, which saw its main use during First Intermediate Period (Phase II).¹²⁸ The square building covers about 80 m² and consists of internal courts and rooms, used for a variety of functions (Figure 7.23). For example, one of the central rooms (room 5) was used for bread baking but also copper smelting and for the manufacturing of flint tools.¹²⁹ These activities were also closely associated with the neighboring room, 6. The bread baking was most likely intended for supplying the people working in this building, and there is little conclusive evidence for larger-scale food production to supply the palace; this seems to have taken place elsewhere in the palace complex, probably just to the north of the workshop area (Figure 7.22).¹³⁰ The copper production seems to have mainly been related to the reworking and smelting of copper that was being recycled from the palatial complex. Few actual copper objects have been found, but the metallurgical work can be deduced, for example, from the crucibles found during the excavations.¹³¹ The finds from the workshop indicate that the supply of raw materials such as flint and stone came predominantly from local sources, suggesting that there had been a break in the contact to and supply from the Nile Valley during the First Intermediate Period. During the Old Kingdom phases of the palatial complex, there is evidence for a larger variety of raw materials, and the textual evidence suggests close links to the central



7.22. Detailed plan of the First Intermediate Period occupation and reconstruction of the governor's palace at Ayn Asil. After C. Jeuthe, *Balat X: Ein Werkstattkomplex im Palast der 1. Zwischenzeit in Ayn Asil*, FIFAO 71, 2012, 35, Abb. 3. © IFAO/GS 2011.

government situated at Memphis.¹³² However, the fact that palatial complex carried on in its function as residence for the local governor in charge of Dakhla Oasis provides some evidence that the political fragmentation of the time

did not lead to an abandonment of the locally established and supported administrative system in this remote region of Egypt, but rather continued on a more regional level, showing less interaction with the Nile Valley.



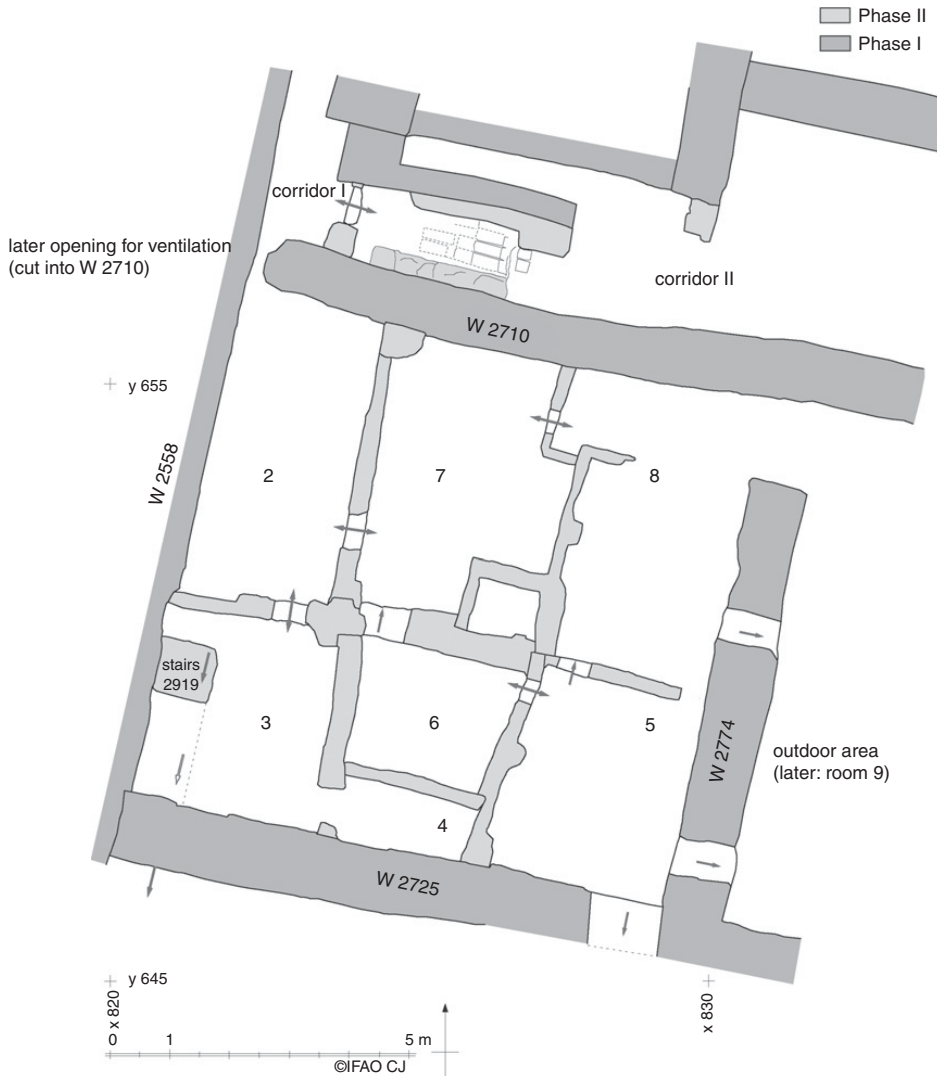
7.23a. Overview of workshop complex in the southern part of the governor's palace at Ayn Asil. After C. Jeuthe, *Balat X: Ein Werkstattkomplex im Palast der 1. Zwischenzeit in Ayn Asil*, FIFAO 71, 2012, 43, Abb. 4. © IFAO/C. Jeuthe.

7.6 CONCLUDING REMARKS

The presented archaeological data is far from being complete and only allow for small glimpses concerning the development of towns at the end of the third millennium BCE. They nevertheless indicate a common pattern emerging in the south, which is characterized by settlement expansion during the transitional period between the late Sixth Dynasty and the First Intermediate Period. Whereas the Memphite region saw a reduction and abandonment of settlements and installations, especially of those that had been linked to the royal mortuary complexes, there is no information about contemporary settlement in the floodplain, which could have accommodated the moving population. Evidence for early towns is almost nonexistent in Middle Egypt,¹³³ where some information can only be deduced indirectly from cemeteries that were used by the population of the respective townsites. A last point that needs to be addressed is a possible rise in the overall population numbers of Egypt during this period, which would have contributed to the enlargement of settlements. Equally possible is that the increase in settlement size in Upper Egypt is the result of a nucleation process that led to an increasing number of people moving to towns and abandoning smaller villages, domains, and hamlets in the countryside. Whether this can be related to the regional conflicts between nomarchs in the south generating much insecurity among the population remains debatable.

As has been discussed in this chapter, the evidence from Elephantine shows a first major attempt to expand the settlement toward the west by settling in the depression between the two islands. This can be seen as some evidence of the need for more space in the rather restricted topography of the eastern island. Another factor that seems to have played a role in this attempt to construct new buildings here is a possible decrease in the height of the flood levels, which for the first time permitted the inhabitants to use this area for settlement.¹³⁴ Similarly, the towns of Edfu, Dendera, and Abydos also show signs of expansion.

While the reason for an increase in the general population numbers of inhabitants could be manifold – for example, as a result of a gradual process of nucleation in the existing settlement pattern¹³⁵ – there is also cemetery data indicating a possible nationwide population growth. For instance, there is a noticeable rise reported for the number of burials dating to the First Intermediate Period at the cemeteries of Qau/Matmar and Etmanieh in Middle Egypt at the end of the Old Kingdom.¹³⁶ O'Conner suggests two explanations for this. It could be either the result of a larger population settling in this area or a rise in the mortality rate and hence the result of a decreasing population.¹³⁷ He proposes that the latter hypothesis is more likely in view of the declining numbers of burials by the Eleventh Dynasty that has been



7.23b. Plan of the workshop complex, southern part of the governor's palace at Ayn Asil. After C. Jeuthe, *Balat X: Ein Werkstattkomplex im Palast der 1. Zwischenzeit in Ayn Asil*, IFAO 71, 2012, 43, Abb. 4. © IFAO/C. Jeuthe.

associated with a politically more stable period. Keeping in mind the level of uncertainty in assigning precise dates to the individual burials at these cemeteries, the results of this analysis should also be considered within the wider framework of anthropological studies on Old Kingdom to Middle Kingdom skeletal material. A detailed investigation of stress levels that are recognizable on the skeletons and by conduction a diachronic analysis of data from different sites in Upper and Middle Egypt, Corinne Duhig was able to show convincingly that the First Intermediate Period assemblages exhibit no signs of being considerably different in comparison with the earlier or later periods.¹³⁸ While she dismisses the characterization of the First Intermediate Period as a period of

social collapse resulting in severe physiological stress, she concludes that her results show evidence for traumatic injuries typical for warfare as well as an increase in infections and parasite infestations during this time.¹³⁹ Thus, the increase in burials within the Matmar-Etmanieh region in Middle Egypt could be the result of local conflict.¹⁴⁰ If this observation is in any way also representative for Upper Egypt,¹⁴¹ a process of nucleation could be the most likely explanation for the expansion of the towns that can be witnessed especially in Upper Egypt.

These first results for trying to improve our understanding of the changes in settlement patterns within the Nile Valley at the end of the third millennium BCE certainly need further evidence in order to be more

conclusive. It is also necessary to develop a better framework for the evolution of the ancient urban landscape within the floodplain in general. This could be achieved, for example, by conducting regional surveys, including drill-core sampling, to better understand the changes in settlement patterns within the overall landscape in certain parts of the Nile Valley. It is evident that some of the political factors, such as the decline of the central government in Memphis, severely affected certain types of habitation sites in the Memphite region but did not seem to have had a major impact on an interregional level. The ensuing local power struggles among regional nomarchs, however, might have been a contributing factor affecting such patterns of settlement. However, these political factors cannot be the only reason, because the expansion of the settlements happened at the very end of the Old Kingdom and the early First Intermediate Period. Socioeconomic factors that led to an increase in the prosperity of towns governed by powerful nomarchs who were in charge of local resources certainly need to be considered too. It is evident that the end of the third millennium BCE in Egypt is not characterized by a widespread political and economic collapse but by major changes that seem to have had positive effects on the population, such as creating a dynamic environment for the development of regional traditions. In addition, the end of the Old Kingdom seems to coincide with a spell of drier climate conditions affecting Egypt.¹⁴² While in the past it has been suggested that a possible short-term climate change led to the collapse of the Old Kingdom state, there is no evidence that the ancient Egyptians were unable to adapt to these drier conditions.¹⁴³

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The Middle Kingdom: Town Planning and Internal Colonization at Its Height

8.1 INTRODUCTION

After a period of political decentralization, the Middle Kingdom gradually evolved from the Eleventh Dynasty centered in the Theban region to the Twelfth Dynasty marked by a strong and stable central government with a clear succession of powerful rulers who reigned for long periods of time (Table 8.1). The regionalism that characterized the First Intermediate Period remained visible in the material culture and was especially noticeable in the burial customs right into the Twelfth Dynasty. It also offered a window for different traditions marking various regions in Egypt at the time.¹ Toward the end of the reign of Amenemhat I, the new national capital, called Itj-Tawy, was founded close to the Fayum region in Middle Egypt, near the modern village of el-Lisht (Figure 8.1).² The actual settlement remains of Itj-Tawy have not been located with much success but were probably in proximity to the two pyramids of Amenemhat I and Senwosret I and the adjacent cemeteries.³ Also important is the continuous rise of Thebes and the temple of Amun at Karnak, which was surrounded by a large city of which traces have been found in various locations at the site. The role of Memphis as a center of administration on a national level cannot be ignored either, and the later pyramids of Amenemhat II and III and Senwosret III at Dahshur certainly show the importance of the Memphite region during the Middle Kingdom. For example, the recent excavations at Kôm el-Fakhry, which comprises one of the smaller tells at the site of Memphis, have led to the discovery of Middle Kingdom settlement remains.⁴ In an excavation area measuring 20 m by 30 m, two substantial buildings have been excavated, one of which seems to be a large residence comparable to similar buildings found at Lahun, a state-planned town located close to the Fayum entrance. Various phases of occupation date to the

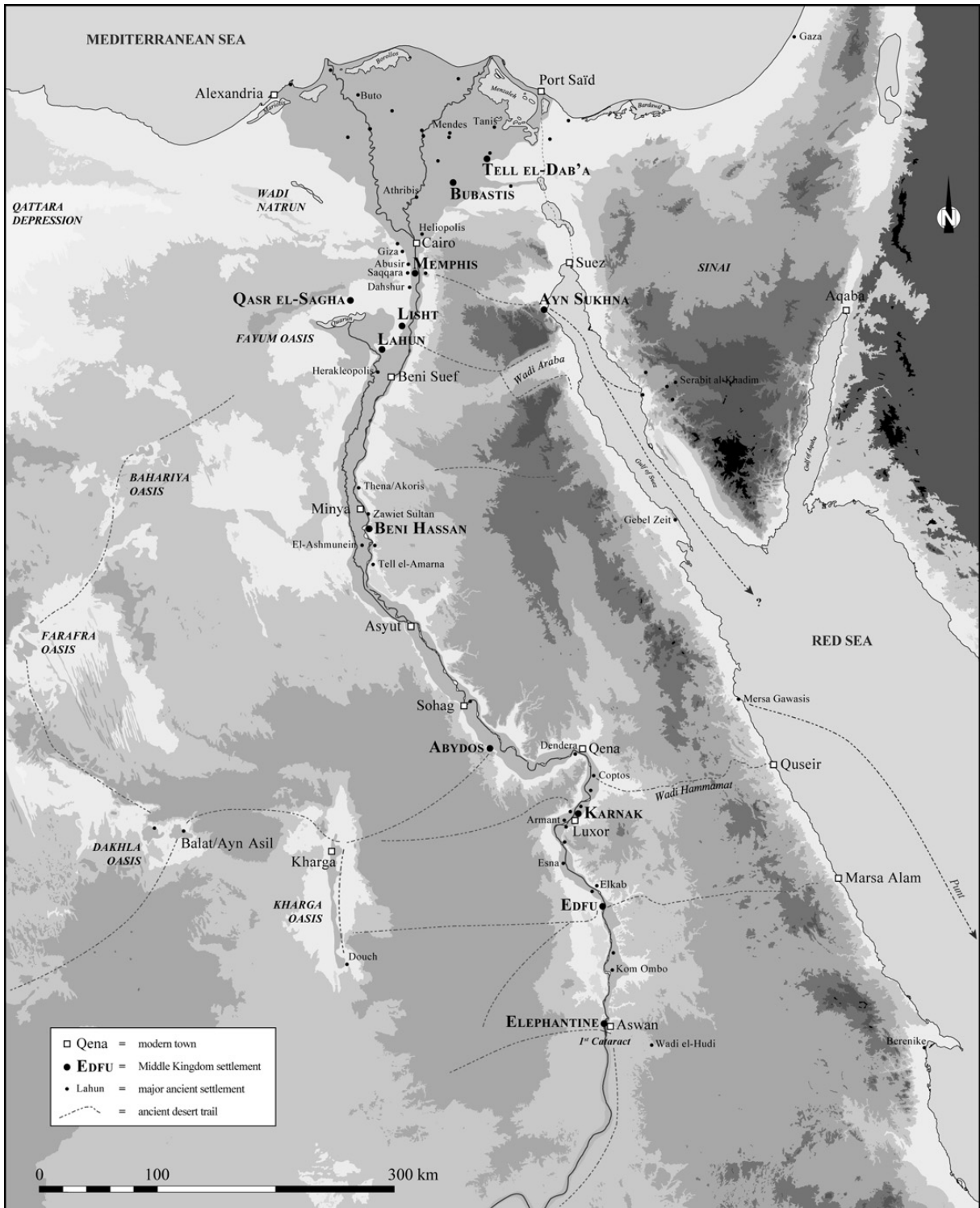
Twelfth and Thirteenth Dynasties. These findings constitute new evidence confirming the existence of a larger city that seems to have extended farther to the south, including Kôm el-Rabi'a, another mound at Memphis, where an artisan quarter of the late Middle Kingdom has previously been excavated (Figure 5.28).⁵

A major interest of Twelfth Dynasty rulers in the Fayum region can be deduced from a concentration of cemeteries and settlements near the Fayum entrance. Amenemhat III erected a large pyramid complex at Hawara, and Senwosret II founded the town of Lahun for the upkeep of his mortuary cult in addition to seeing to the construction of his pyramid (Figure 8.19). As part of a larger, probably economically driven policy, the kings of the Twelfth Dynasty focused much building activity in this semi-oasis, which was a fertile region surrounding the large lake and swamp areas that were rich in waterfowl. These had been the favored hunting grounds of the highest elite and kings from the Old Kingdom onward. The annals of Amenemhat II, for example, report about a fishing and fowling excursion by the king.⁶ At the entrance to the Fayum, where nowadays the Bahr Yussef canal enters the depression from the Nile Valley, remains of an ancient dam have been found. This find seems to be evidence for an irrigation measure taken by the Middle Kingdom rulers to improve control of the water flow into the depression.⁷ The most prominent Middle Kingdom installations within the Fayum region consist of a smaller settlement and cemetery to the north of the lake at Qasr el-Sagha, which is the location of an unfinished temple. Along the eastern side of the lakeshore, Amenemhat III erected a monument with two colossal statues at Biahmu.⁸ Both sites need to be viewed within the framework of an important effort in

TABLE 8.1. Chronology of the Middle Kingdom

Dates B.C.		Lower Egypt		Upper Egypt
1600		Xois	Avaris	
	Second Intermediate Period	Dyn. 14	Dyn. 15	Dyn. 16
	<i>- Hyksos domination</i>			Dyn. 17
	Dynasty 13 (1773- ca. 1650 B.C.)	? Ay (Merneferri) Sobekhotep V Sobekhotep IV (Khaneferri) Sahator Nefehotep (Khasekhemra) Sobekhotep III (Sekhemra-sewadjtawi) Khendjer (Userkara) Hor (Awibra) Ameny-intef-amenemhat (Sankhidra) Iykhernefret Neferhotep (Sankhtawi-sekhemra) Sobekhotep II (Sekhemra-khutawi) Wegaf (Khutawira)		
1800				
	Dynasty 12 (1985-1773 B.C.)	Sobekneferu - Sobekkara (1777-1773) Amenemhat IV - Maakherura (1786-1777) Amenemhat III - Nimaatra (1831-1786) Senwosret III - Khakaura (1870-1831) Senwosret II - Khakheperri (1877-1870) Amenemhat II - Nubkaura (1911-1877) Senwosret I - Kheperkara (1956-1911) Amenemhat I - Sehetepibra (1985-1956)		
1900				
	Dynasty 11 (all Egypt) (2055-1985 B.C.)	Mentuhotep IV - Nebtawira (1992-1985) Mentuhotep III - Sankhkara (2004-1992) Mentuhotep II - Nebhetepira (2055-2004)		
2000				
	First Intermediate Period 7 th -8 th Dyn. (ca. 2181-2160) 9 th -10 th Dyn. (2160-2025) Theban 11 th Dyn. (2125-2055)	9th-10th Dyn. (Herakleopolitan) Merykara Khety (Wahkara) Khety (Nebkaura) Khety (Meryibra)		11th Dyn. (Theban) Intef II (2063-2055) Intef II (2112-2063) Intef I (2125-2112) [Mentuhotep I]
2100				

By G. Marouard, based on I. Shaw, *The Oxford History of Ancient Egypt*, Oxford 2000.



8.1. Map of Middle Kingdom settlement sites in Egypt. By G. Marouard.

settling and exploiting the agricultural potential of the Fayum region, which until then had been relatively untouched.⁹

The development of the Fayum region was to some extent part of a larger plan to expand settlement and related infrastructure into the more marginal areas of the

country. It cannot be a coincidence that a large planned town of the Twelfth Dynasty was also founded in the eastern Delta, at Tell el-Dab'a, another part of Egypt that had been left without any major occupation until then. In this case, however, the Twelfth Dynasty seems to follow the footsteps of an earlier attempt to "colonize" this region during the Eleventh Dynasty. The choice of Tell el-Dab'a as a settlement site was closely related to the extremely advantageous location next to the Pelusiac Nile branch, which also included two natural harbor basins in an area with much agricultural potential (Figure 8.48). In addition, it was situated close to important trade routes into the southern Levant as well as having direct access to the Mediterranean seashore via the river.

Another example of a major effort to control regions of economic importance can be appreciated from the line of large fortresses, built by Senwosret I and III, in Lower Nubia beyond the Second Cataract (Figure 8.33).¹⁰ Those sites are evidence for putting in place an effective mechanism to control trade on the river, but also along the desert margins, and exploiting a region that had been famous for its goldmines. The fortresses – which were constructed to be well defensible, with special features of military architecture such as heavily fortified walls and gates, parapets, and a glacis in addition to protected river stairs in case of a siege. The internal layout followed a strict orthogonal organization consisting of barracks, a command center, and storage installations, especially granaries (see Figures 8.34–8.37). Other regions of increased interest during the Middle Kingdom were the Sinai Peninsula for the exploitation of copper and turquoise, including the construction of a major temple complex at Serabit el-Khadim; the galena mines along the Red Sea coast at Gebel Zeit; and the amethyst mines of Wadi el-Hudi in the eastern desert of the Aswan region (Figure 8.1). Royal seafaring expeditions departed from the Red Sea coast at Mersa Gawasis en route to the land of Punt, which was probably located farther to the south, somewhere along the coastline of the African continent, possibly in the region of modern Ethiopia. The demand for luxury items and expanding trade networks, witnessed by imported pottery wares from the eastern Mediterranean, paint a picture of a highly complex and well-established elite that surrounded the royal court, effectively controlling important regions economically and establishing a new infrastructure to support the growing demands.

This is the framework in which the evolution and foundation of towns and cities need to be considered.

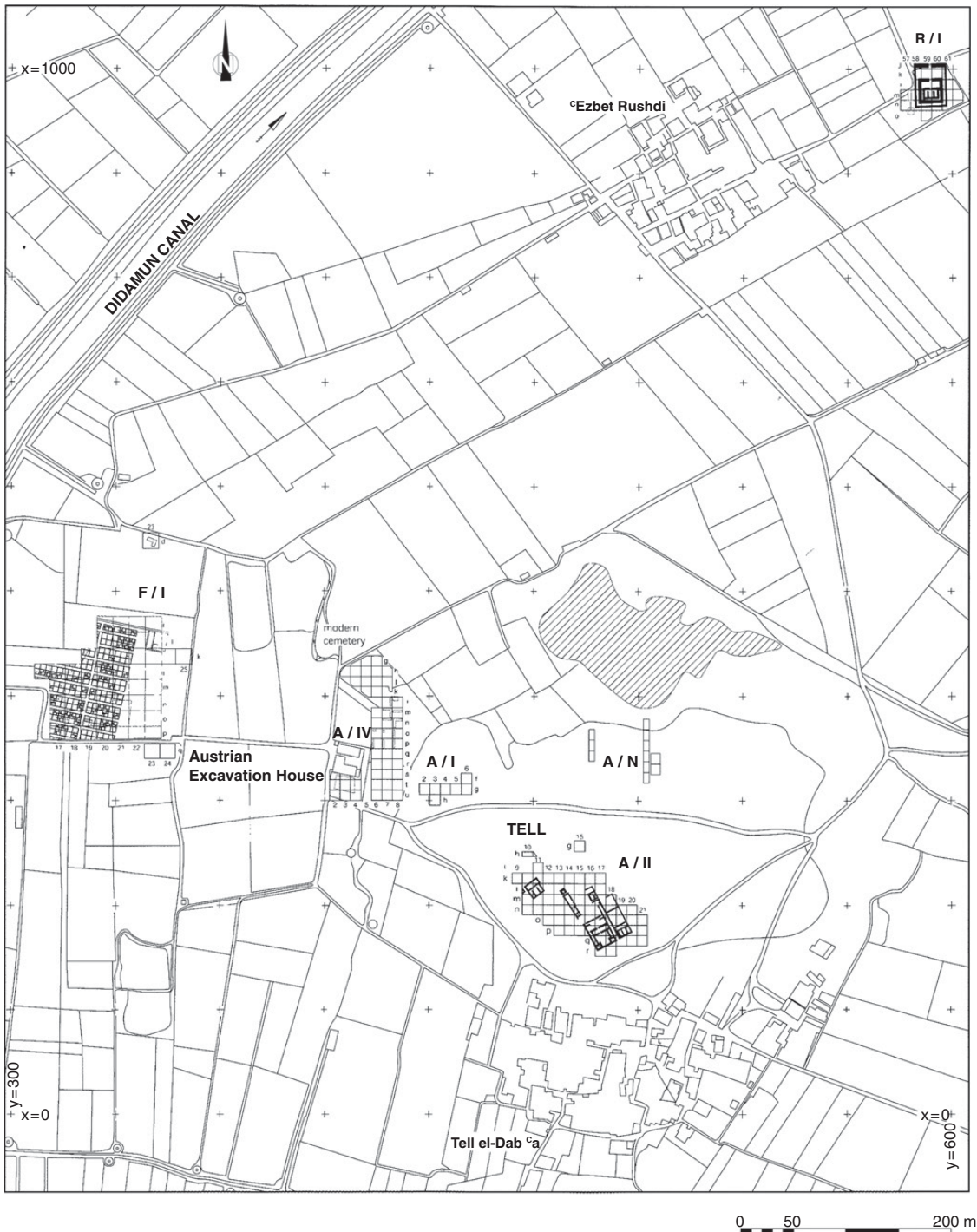
The following analysis focuses specifically on those sites from which enough evidence is preserved to allow an understanding of the layout, organization, and function of the respective settlement. The first part of this chapter deals with state foundations, discovered in different regions and shedding new light on how the Middle Kingdom state conceptualized the needs of a community living in a newly founded settlement that was frequently linked to a specific task such as agricultural exploitation, acquisition of raw materials, or the upkeep of royal mortuary complexes. Latter examples are of more elaborate versions of the so-called pyramid towns, a type of settlement already known from the Old Kingdom. The second half of this chapter centers on settlements within the Nile Valley, of which admittedly few are still preserved; they provide further insight into the long-term development of "organically" evolving towns. Those sites did not seem to have been the focus of any major town-planning effort by the state and exhibit only some elements of close contact with the central government, usually in relation to temple buildings.

8.2 STATE-PLANNED SETTLEMENTS

8.2.1 Evidence from the Delta at Tell el-Dab'a, area F/I

The earliest settlement at Tell el-Dab'a has been excavated in area F/I, one of the more centrally located areas at the site (Figures 8.2 and 8.48). The whole area had an advantageous natural environment that was characterized by the Pelusiac Nile branch on the west, which provided easy access to the Mediterranean coast as well as south to the Memphite region. Drill-core surveys and geomorphological studies in the region around the modern village of Tell el-Dab'a have provided further details about the ancient landscape, consisting of sandy mounds, or *geziras*. These are beneficial for settlement because of their elevation from the surrounding land, lying about 4 m higher than the level of the floodplain.¹¹ In fact, the *geziras* formed islands within the Delta during the perennial flood season.

The planned town excavated in area F/I is so far the oldest settlement in the whole area. Although only a part of the site has fully been excavated, numerous test trenches have revealed the continuation of a pattern over an area of 10,000 m², without reaching the limits, apart from the northern and eastern sides. The actual settlement is characterized by a strict orthogonal layout



8.2. Tell el-Dab'a archaeological site with the two Middle Kingdom areas, F/I and R/I, at Ezbet Rushdi. After E. Czerny, "Fragments of Information. Observations concerning the Architectural Layout of the Middle Kingdom Settlement at 'Ezbet Rushdi,'" in M. Bietak et al. (eds.), *Cities and Urbanism in Ancient Egypt*, Wien 2010, 70, fig. 1. © Austrian Archaeological Institute.

consisting of rows of identical house units that are separated by larger streets 2.6 m to 2.7 m wide (Figure 8.3). The house units are arranged in double rows and are built

back to back, showing an identical internal arrangement of five small rooms encompassing only 27 m² in total for each unit (phase e/3) (Figures 8.3 and 8.4).¹² While 189



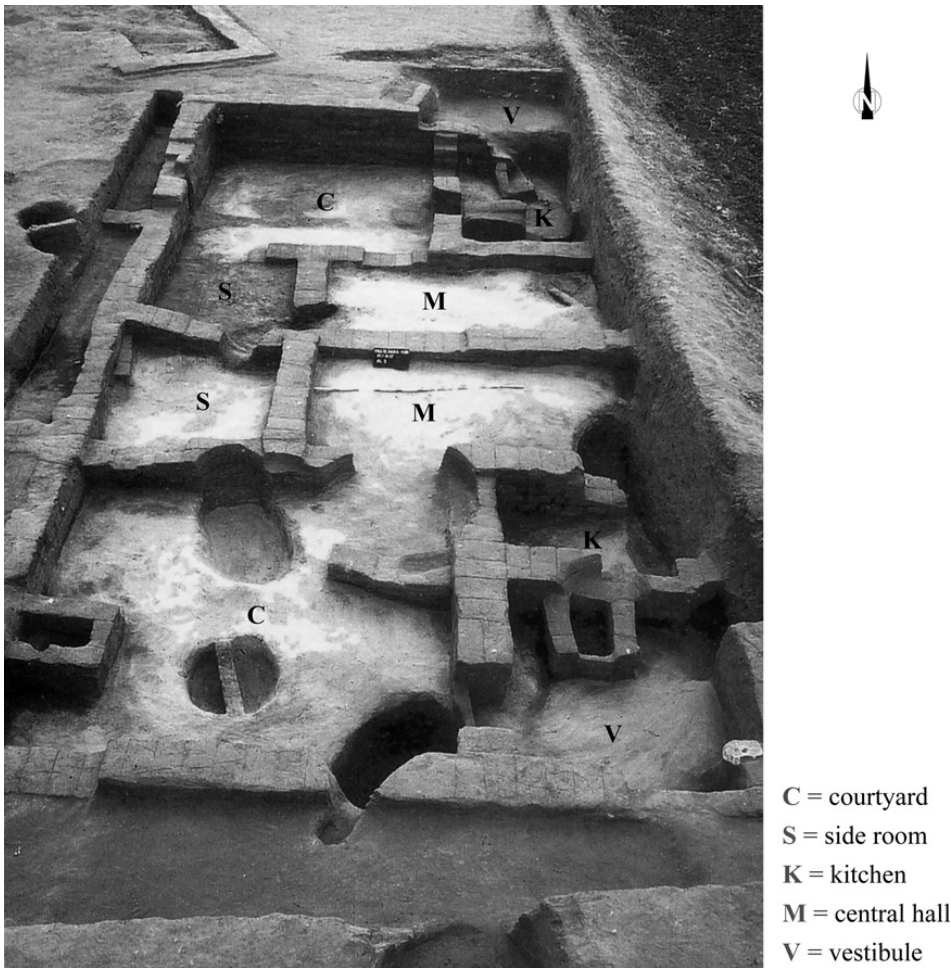
8.3. Early Middle Kingdom planned settlement (Phase e/2–3), area F/I at Tell el-Dab'a. After E. Czerny, *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*, Vienna 1999, 18, Abb. 2. © Austrian Archaeological Institute.

house units were directly identified on the ground, more than 342 houses were once part of this settlement.¹³ A mud-brick perimeter wall with a thickness of 1.6 m surrounds the settlement on the northern side at least, while the southern, eastern, and western limits have not been attained. According to the excavators, remains of a separate building of much larger size have been found in the northeastern corner, but it has not been possible to identify the structure's precise function (Figure 8.3). To the east of the first house blocks lies a large empty space without any traces of settlement activity.¹⁴

Three principal building and occupation phases have been distinguished (e/3–e/1). The oldest phase (e/3) comprises the original foundation of the settlement, with uniformly laid-out houses, each consisting of five small rooms and arranged in a mirror image of the former, larger housing blocks (Figures 8.3 and 8.4). The eastern

blocks consist of a double row of six house units, separated by streets on each side. Further to the west, the blocks seem to be longer and consist of at least ten house units, also arranged in double rows (Figure 8.3). Each unit was made up of a small entry room leading into a tiny kitchen, where blackened walls and fireplaces on the floor show evidence for cooking and food preparation (Figure 8.4). The entrance area also provided access into the largest room, which was probably an open courtyard forming the main activity area.¹⁵ From this courtyard, two rooms in the back of the house could be accessed. The initial phase of settlement layout did not survive very well, because it seems that almost as soon as people moved in, they started making changes.

The best-preserved and more substantially analyzed phase is the second phase of occupation (e/2) (Figure 8.5). It basically encompasses the time when this



8.4. Two house units of the settlement in area F/I at Tell el-Dab'a. After E. Czerny, *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*, Vienna 1999, 21, Abb. 3. © Austrian Archaeological Institute.

planned settlement was fully functioning and therefore yielded the most evidence for occupation and activities carried out by its inhabitants. This phase is characterized by constant changes and adaptations to the layout, specifically concerning the internal arrangement of rooms and house units. The most typical changes focused on the opening of new doorways, the dismantling of internal walls in order to create larger spaces, and the merging of several house units into one. This can best be seen in square I/20, where units 5 to 9 were newly connected through added doorways, forming a much larger house of at least 108 m² (Figure 8.5). Another house unit was entirely converted into a courtyard. Many additions and alterations also led to the creation of storage facilities such as rectangular and round grain silos (Figure 8.6). In their original layout, the house units did not have any facilities for storing larger amounts of grain, which is noteworthy.

The settlement was abandoned at the end of this occupation phase (e/2), in a kind of “planned” fashion, which can be witnessed by the presence of bricked-up doorways.¹⁶ It is possible that the occupants anticipated some return in the future.¹⁷

The last phase of occupation (e/1) is rather badly preserved due to later building activities in the area. After a hiatus in occupation, during which trash was left to accumulate on the surface, the settlement was rebuilt, but with an entirely different layout that is characterized by larger individual houses and courtyards (Figure 8.7). Some of the walls of this period use the earlier ones as foundations, resulting in some of the more general alignments being retained in this phase of reoccupation. The architecture is more reminiscent of privately planned and built houses, which stands in contrast to the initial foundation of the settlement. Its inhabitants seem to have had production

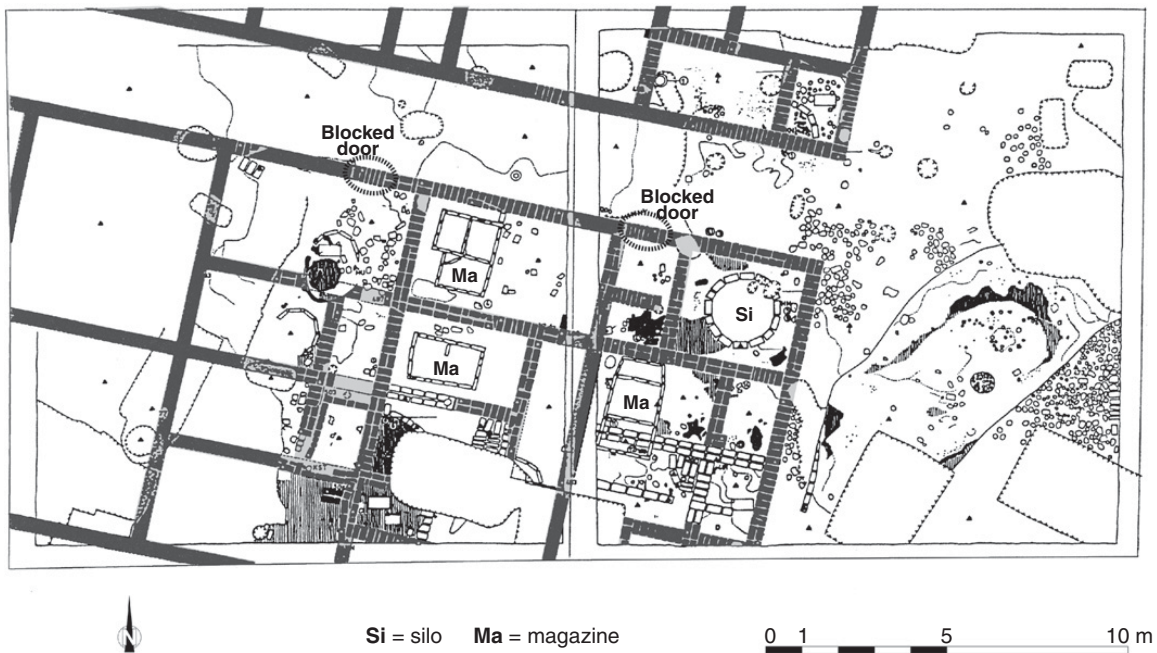


8.5. Phase e/2 of the planned settlement in area F/I at Tell el-Dab'a. E. Czerny, *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*, Vienna 1999, 22, Abb. 4. © Austrian Archaeological Institute.

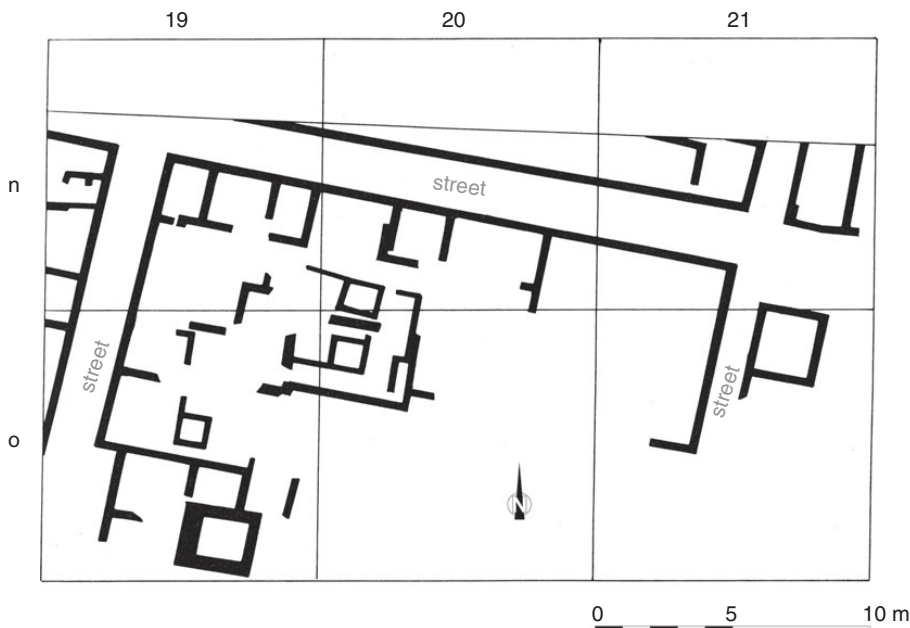
and storage areas, as well as facilities to keep animals, and were probably primarily engaged in agriculture.¹⁸ Ernst Czerny interprets this as an evolution from a state-planned site to a more privately organized settlement.

Precise definition of the chronology of this settlement in area F/I at Tell el-Dab'a has been quite problematic. It is clear from the ceramic evidence, which has been analyzed in great depth by the excavators, that the site dates to the early Middle Kingdom. The time of its foundation and its exact duration is much harder to establish, however, because of the disturbances in the archaeological sequences by later settlement activity above it. Czerny points out that it has not been possible to distinguish any changes in the pottery assemblages among the three

occupation phases (e/3–e/1).¹⁹ He also emphasizes that it was almost impossible to separate the ceramic material of the last phase (e/1) from the previous one due to the nature of the archaeological preservation. The typology of the pottery clearly shows a considerable range of vessels with characteristics of the late First Intermediate Period and early Eleventh Dynasty up to the early Twelfth Dynasty.²⁰ It is entirely plausible that it was founded sometime during the early Eleventh Dynasty and was then occupied until the early Twelfth, but the dating can be no more precise than that. Czerny estimates a lifetime of about sixty years for the entirety of the site before it was replaced by the occupation of a palatial district during the Thirteenth Dynasty.²¹



8.6. Phase e/2 of the planned settlement with added silos and storage magazines, area F/I at Tell el-Dab'a. E. Czerny, *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*, Vienna 1999, 25, Abb. 7. © Austrian Archaeological Institute.



8.7. Phase e/1 of the settlement, showing large houses with courtyards, area F/I at Tell el-Dab'a. After E. Czerny, *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*, Vienna 1999, 27, Abb. 9. © Austrian Archaeological Institute.

The development of this site from a preplanned settlement, which was most likely the result of an initiative taken by the state, to one that had then been adapted by

the inhabitants according to their personal needs is important to consider further. The small size of the original house units seems hardly adequate for most

households, allowing a maximum of only up to two or three people per unit.²² In this respect it is not surprising that the inhabitants started to make changes to the internal layout at the outset when taking up residence at this settlement. The alterations did not all occur simultaneously and in the same manner within the whole site, which is good evidence for individual decision-making in this matter. Most changes concerned the merging of several house units into one by adding new doorways and creating larger courtyards with the addition of storage facilities, the lack of which is noticeable in the original layout and had obviously been deemed unsatisfactory by the inhabitants.

Although these changes appeared immediately during the initial phase of occupation (e/2) (Figure 8.5), it can be noted that the residents did not profoundly alter the original layout and that there are no signs of any expansion beyond the perimeter wall. This is a phenomenon that can be observed at most, if not all, of the state-planned settlement sites (see further examples in upcoming sections). Whether this indicates a firm regulation of community size by a central authority remains debatable. It seems that internal additions and rearrangements of living space were less regulated and left to the needs of the inhabitants, whereas the overall size of the community was restricted. As can be learned from the earlier royal decrees pertaining to pyramid towns in the Old Kingdom, the population of such settlements was controlled by the central government.²³ Unfortunately there is no textual data pertaining to this issue for the Middle Kingdom.

Another observation that relates to the nature of the alterations within the house units concerns the construction of larger storage facilities for private use. Czerny notes in his description of the second occupation phase (e/2) that one of the main additions to the houses were rectangular magazine-like structures and smaller silos within the courtyards.²⁴ The fact that those were missing, as in so many other preplanned sites, is important for evaluating the nature of town planning, the needs anticipated by the planning agency, and the economic setup of these towns, on which the absent storage likely sheds some light. The original layout of the preplanned settlement at Tell el-Dab'a did not envisage any private storage installations for the households, suggesting that a system was in place to provide some regular supply in the form of rations by the authority controlling the settlement.

Thus, the reaction by the inhabitants of adding these storage facilities might reflect the existence of a more

private economy and subsistence, which could easily have functioned parallel to the redistributive nature of the official state economy. As can be seen at the later towns of Lahun and Wah-Sut, storage installations were mainly part of the original layout in the larger elite or villa-style houses – and at Wah-Sut, also in the mayor's house (see Section 8.2.5.2). The smaller houses at Lahun are devoid of any silos or magazines, which indicates that at least upon the onset of settling at these state-planned towns, the layout reflected a redistributive system wherein the larger houses could have supplied the majority of the remainder of the residences with rations. Therefore there was not the immediate need to store surpluses in silos or magazines.²⁵ A similar phenomenon can be seen at the New Kingdom Amarna workmen's village, where it is evident that the community was controlled and supplied to some extent by the main city. The archaeological evidence shows that the village inhabitants found ways to adapt their diets to their situation – for example, by keeping pigs and growing plants – because only a basic supply seems to have been provided to them by a central authority.²⁶ At Tell el-Dab'a, a similar phenomenon is indicated by the large amount of pottery vessels and bottles made of marl clay, which is not locally available as a clay source.²⁷ It points to regular deliveries from the Memphite region to Tell el-Dab'a.

The parallels furnished by these other special-purpose settlements strongly suggest a two-tier economic system where the official economic support by the central government or the royal residence followed the redistribution model, while at the same time a much less archaeologically visible private economy existed too. The fact that surplus storage was obviously on the minds of the inhabitants points to some of their income deriving from farming/plant growing. It is also possible that they might have been able to exchange animals raised for their own consumption on the exterior of the settlement, such as pigs, for other commodities and produce. The faunal analysis from excavated remains at the Tell el-Dab'a site indicates a sizeable amount of pigs and sheep/goats but also a relatively high percentage of cattle.²⁸ Fish was also a main part of the diet. The fact that there has been a considerable amount of faunal remains from this settlement suggests that these animals were probably kept somewhere in the vicinity.²⁹ The importance of pig among the faunal remains further confirms its role as a valued source of protein that supplemented the diet. Pigs were raised by local initiative, and there is no evidence that they were part of the supplies distributed by the state

authorities – in contrast to cattle, for example.³⁰ In the last phase of reoccupation of the settlement (e/1), the pig lost its dominance to sheep/goats as a source of meat.

Czerny interprets the evidence as the evolution from a state-controlled settlement with inhabitants probably primarily engaged in agricultural activities to a much more privately organized settlement by phase (e/1) with inhabitants continuing to be mainly involved in agriculture.³¹ The purpose of the initial foundation of the preplanned settlement has been difficult to establish because of little concrete evidence, and the association with agricultural exploitation is based mainly on the discovery of numerous sickle blades in the small houses. A possible engagement of the inhabitants in construction work seems unlikely, because there is no evidence for any major building work in the region surrounding Tell el-Dab'a during the early Middle Kingdom that would have necessitated a large and settled workforce. Thus an attempt to “colonize” this remote area of the Nile Delta, which would become a key player during later periods, and to exploit the available fertile land is a possible solution for understanding the purpose of this site.³²

8.2.2 The planned settlement at Ezbet Rushdi – area R/I at Tell el-Dab'a

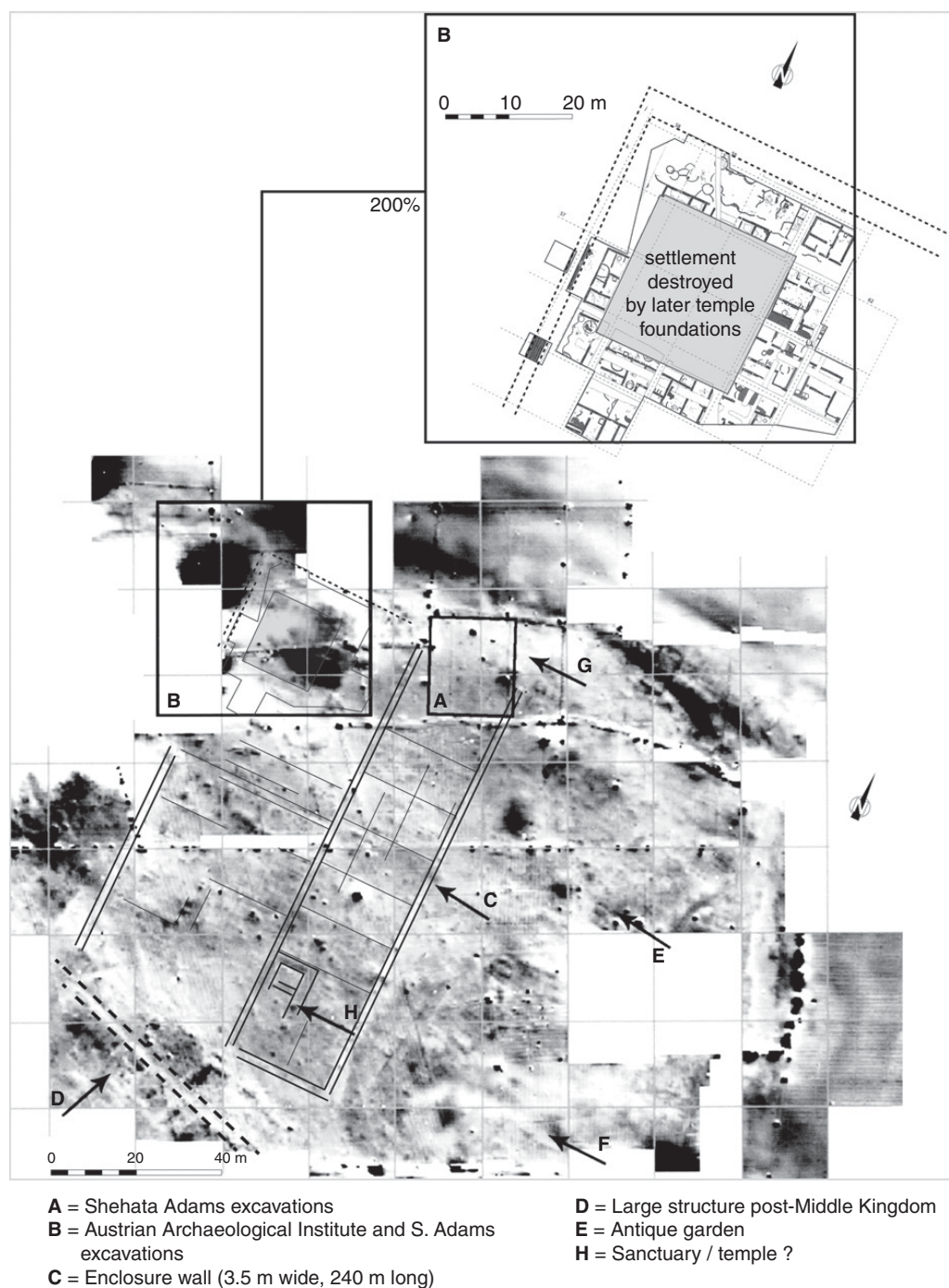
Excavations by the Austrian mission near the modern village of Ezbet Rushdi, in the larger region of Tell el-Dab'a, found evidence for a temple dating to Senwosret III that had been surrounded by mud-brick buildings probably belonging to a larger settlement (Figure 8.2).³³ Ezbet Rushdi is located along the northern edge of the site, at a distance of about 1.5 km from area F/I.

Underneath the temple, an earlier settlement has been discovered, which, although badly preserved due to the construction of the later temple, showed elements of an orthogonal organization and houses following a repetitive layout pattern (Figure 8.8).³⁴ Only a small part of the settlement has been excavated, but the geophysical survey conducted in 2004 shows traces of the presence of a much larger, orthogonally laid-out settlement orientated north to south in the immediate vicinity (Figure 8.8). The excavated remains and those detected by the survey have not yet been linked by archaeological fieldwork, although it is likely that they belong to the same town.³⁵ The grid pattern observed on the images from the geophysical survey shows north–south streets that separate discrete blocks of mud-brick buildings. The eastern border of the settlement, which is defined by a north–

south street and a narrow wall, can be followed on the map for about 240 m (Figure 8.8). The east–west expansion of the town can be traced for about 130 m, leading to a figure of about 3 ha for the full size of the planned settlement as it is currently visible on the geophysical survey plan. In addition, it is possible to observe distinctly square building blocks that vary slightly in size from north to south and measure 21 m to 26 m along their sides (Figure 8.8).³⁶ Thick mud-brick walls surrounding a building block in the southern part might have formed another sanctuary, but only archaeological fieldwork can fully confirm this observation.³⁷

Excavations in the vicinity and underneath the Middle Kingdom temple also revealed fragments of mud-brick buildings and streets with an orthogonal layout. The character of this site is very different from the one in the previously discussed area F/I. The individual houses are larger in size here, about 50 m² to 60 m², with a core of a minimum of three rooms. The houses were constructed according to a repetitive plan of three large rooms comprising two longitudinal rooms fronted by a transverse room (see Figure 9.4).³⁸ In some cases these core units had an additional room in the rear.³⁹ In comparison with the settlement in area F/I, in addition to the houses being larger, each of them had access to a courtyard area of about 25 m², which was used for storage installations.⁴⁰ These open spaces in front of the buildings were equipped with round silos for grain storage. It is not clear whether these activity areas were shared by several buildings of a double block or whether the sinusoidal retaining walls that can be seen on the plan were used to separate individual areas from each other according to the ownership of the houses (Figure 9.4). From the fragmentary remains displayed on the published plan, it seems that the first solution is more likely, because the sinusoidal walls seem to surround and subdivide the yard areas but without showing any obvious patterns, which makes it difficult to assign discrete areas to specific house units (Figure 9.4).⁴¹ The discovery of numerous flint implements in these yards suggests the occasional presence of manufacturing areas here.⁴² A larger open area, termed “public economic area” and consisting of silo installations and more sinusoidal screen walls, seems to have occupied the northwestern corner of the site.⁴³

The peculiar curved mud-brick walls (termed sinusoidal walls here) are an interesting feature of the courtyard areas and appear to have been used as screen walls delineating the yard space, with the possible aim of dividing it up into separate activity areas. Such walls were also built



8.8. Geophysical survey of Ezbet Rushdi North showing the orthogonally laid-out settlement. After I. Forstner-Müller et al., “Preliminary report on the Geophysical Survey at Ezbet Rushdi/Tell el-Dab’a in Spring 2004,” *Ägypten und Levante* 14 (2004), 105 fig. 5; and E. Czerny “Fragments of Information. Observations concerning the Architectural Layout of the Middle Kingdom Settlement at ‘Ezbet Rushdi,’” in M. Bietak et al. (eds.), *Cities and Urbanism in Ancient Egypt*, 2010, 76, fig. 7. © Austrian Archaeological Institute.

around the small grain silos (Figure 8.9). Sinusoidal walls are typical for the Middle Kingdom and have appeared in various settlement and cemetery contexts at many

different sites in Egypt. They were primarily used as temporary screen and dividing walls.⁴⁴ The open spaces next to the mud-brick houses do not show any particular



8.9. Sinusoidal walls and silos of the courtyards belonging to the houses of phase e/1–2, area R/I, at Tell el-Dab’a. After M. Bietak et al., “Der Tempel und die Siedlung des Mittleren Reiches by ‘Ezbet Ruschdi. Grabungsvorbericht 1996,” *Ägypten und Levante* 8 (1998), 38, A. © Austrian Archaeological Institute.

evidence for keeping animals. The analysis of the faunal remains indicates that pig bones were prevalent at the site, but according to the archaeological evidence, it seems that keeping the pigs would have occurred on the outside of the settlement, as there is no evidence for any animals pens.⁴⁵

The excavators noted four subphases of occupation (e/4 –1). These show a gradual change to more individual layouts and additions to the original house plans, although the principal nature of the settlement remained quite close to its original layout.⁴⁶ There is no evidence for a settlement phase that would parallel the alterations that characterize the last phase of occupation in area F/I, where the layout and size of the houses was so different from the original foundation that only some walls and the general orientation remained reminiscent of the earlier, preplanned site. The exact purpose of the planned settlement in area R/I has not yet been identified, though there is the notion that it was conceived for entire families, based on the overall size and presence of multiple storage installations and other household facilities.⁴⁷ It is possible that agricultural exploitation was again one of the

main objectives here, similar to what has been proposed for the earlier settlement in area F/I.

As for the date of this site, the later temple, which was partially constructed above the settlement, provides some additional information. The temple was probably founded late in the reign of Senwosret II or early during the reign of Senwosret III, which provides a *terminus ante quem* for the underlying town. Analysis of the pottery found within the 70–90 cm thick accumulation of occupation layers more or less dates the settlement to the second half of Senwosret I at the earliest or possibly to the reign of his son and successor Amenemhat II.⁴⁸ It is clear from the relatively uniform pottery assemblage of this site that it dates quite a bit later in comparison with the planned settlement in area F/I.⁴⁹

The archaeological evidence for at least two important pre-planned special-purpose settlements at the site of Tell el-Dab’a can be interpreted as a sign of increasing interest and invested effort by the early Middle Kingdom rulers in taking control of an area that was later to develop into one of the most important strategic and economic regions within the eastern Nile Delta. It was continuously

occupied until the early New Kingdom, after which settlement shifted further to the north, to the site of the modern village of Qantir, which became the capital Pi-Ramesses during the later New Kingdom. Changes in the river course are a commonly evoked reason for abandoning Tell el-Dab'a.

Town planning, in view of the evidence from Tell el-Dab'a, is clearly associated with the efforts to implant new communities on a more-or-less permanent basis in this territory. These settlements would have been mainly engaged in agricultural activities but could also have channeled trade with the southern Levant, an activity that becomes increasingly apparent during the late Middle Kingdom, when this area saw an important influx of settlers coming from the Syro-Palestinian region. The first trade contacts are witnessed at Ezbet Rushdi by the presence of imported pottery, which includes Levantine Painted Ware and two fragments of Minoan amphorae.⁵⁰ At Ezbet Rushdi it is also possible to see the next step initiated by the Middle Kingdom state: the construction of a first sanctuary above the preplanned settlement. This might be a sign for the transition from the initial colonizing attempts, which are characterized by the foundation of two special-purpose settlements probably linked to agricultural exploitation in this region, to a long-term settlement with its own temple that would have been linked to the national economic system.

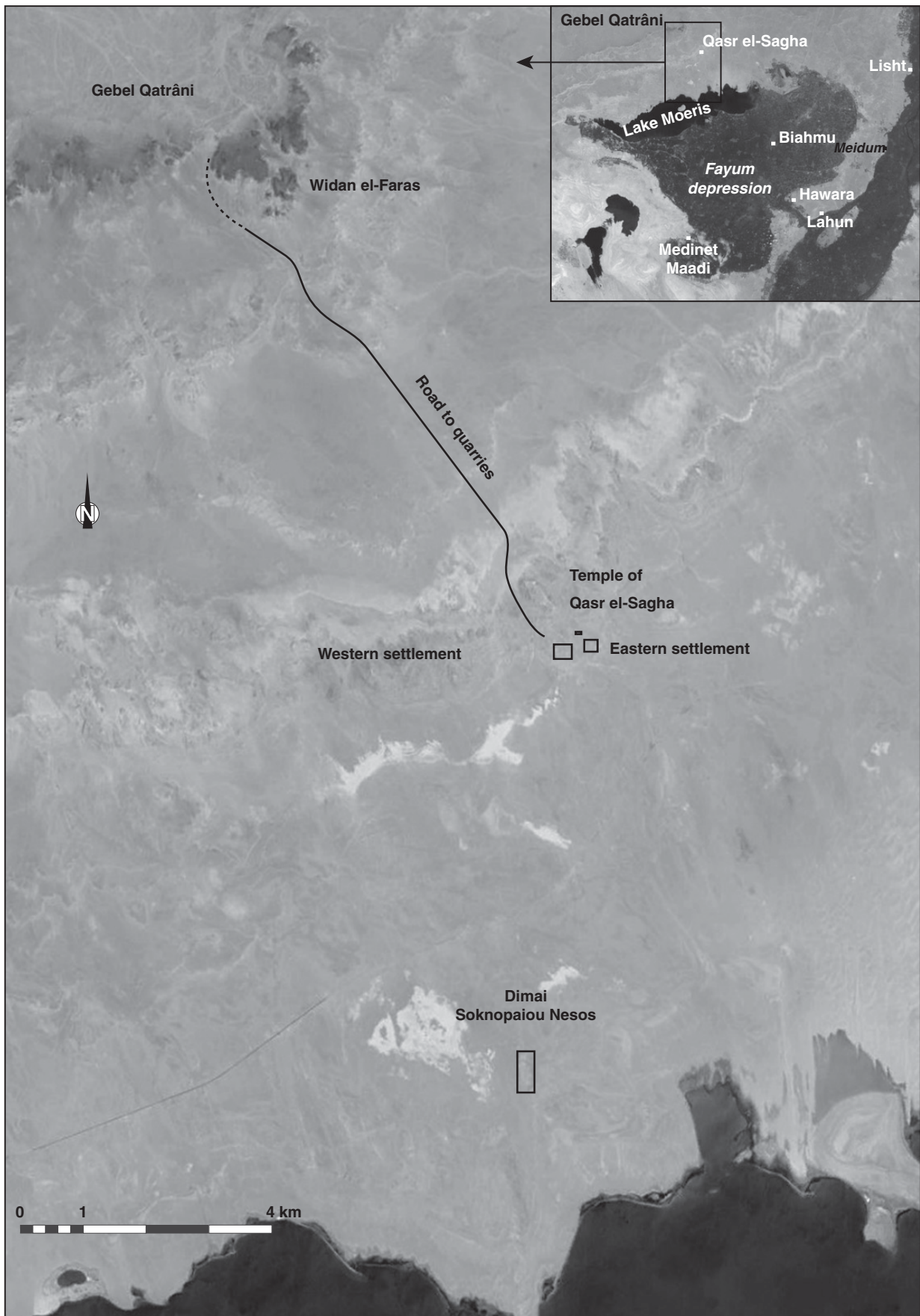
8.2.3 Settlement at Qasr el-Sagha in the northern Fayum region

An interesting example of a planned and orthogonally laid-out settlement installation has been discovered in the Qasr el-Sagha region along the northern side of the Birket Qarun lake (Figure 8.10). Remnants of two small settlements, the Eastern and Western Settlements, have been excavated here and lie about 250 m to the southeast and southwest of the unfinished stone temple, separated by a wadi depression (see Figure 8.11). The temple is the most conspicuous landmark at Qasr el-Sagha, being situated on an elevation of 34 m above sea level.⁵¹ The results from archaeological and architectural investigations carried out by Dieter and Dorothea Arnold indicate that this temple dates to the Twelfth Dynasty, probably to the reign of Senwosret II, with a possible completion date under Senwosret III.⁵² Further important installations in this northern region of the Fayum are associated with the basalt quarries at Widan el-Faras/Gebel el-Qatrani, which are linked via a paved road stretching over a

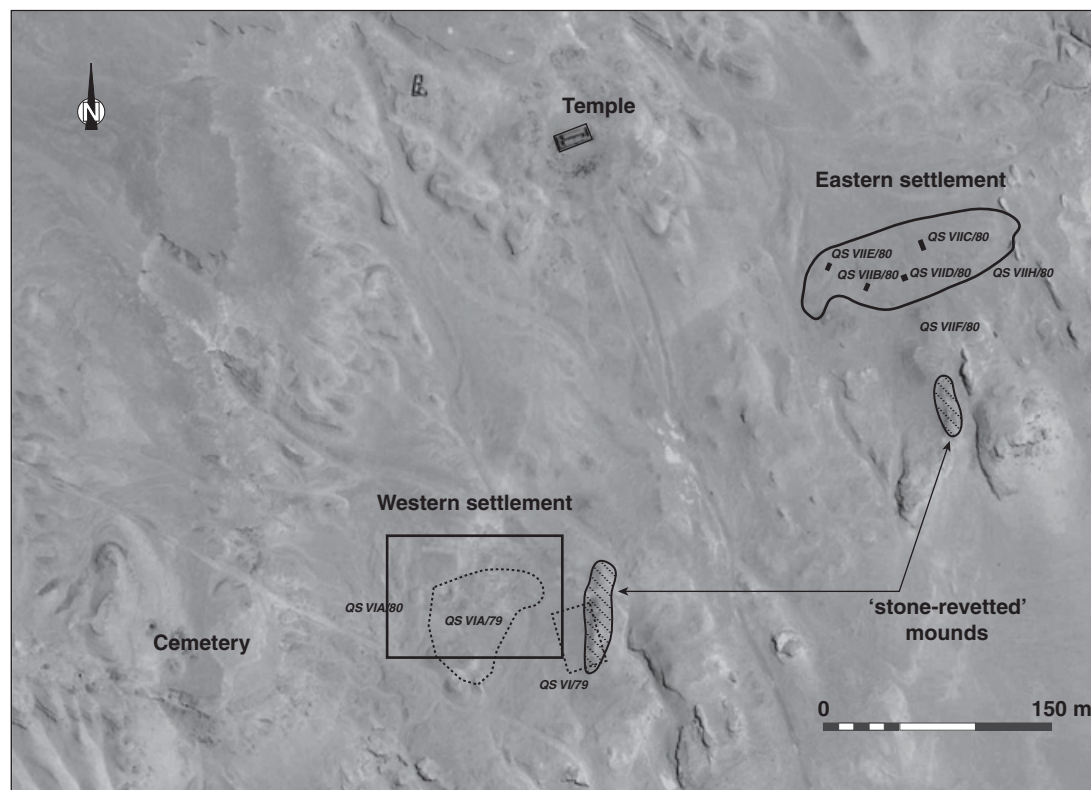
distance of 10 km to a quay structure near Qasr el-Sagha temple (see Figure 8.10). Several recent investigations at the quarries found evidence for Old Kingdom and Roman quarrying activities.⁵³ The Old Kingdom exploitation is not surprising, because the use of basalt in the funerary architecture within the Memphite region is well attested. For example, petroglyphic analyses of basalt used in the mortuary temple of Khufu at Giza as well as the temple of Userkaf at Saqqara show that it originates from Gebel el-Qatrani.⁵⁴

The excavations of the two settlements in the vicinity of the Middle Kingdom temple started in 1979, under the direction of Joachim Šliwa, and focused specifically on the Western Settlement, which was found to be in a much better state of preservation than the eastern one.⁵⁵ While only limited data has been recovered from the eastern site, the western one was the focus of more-detailed excavations from 1979 to 1985. The overall layout of the Western Settlement is reminiscent of a barrack-like installation, a design that belongs to the category of state-planned settlements (Figure 8.12). Its layout follows an orthogonal grid layout and is strictly north-south orientated. It is surrounded by a 2.15 m thick mud-brick enclosure wall, which clearly defined the limits of this settlement. It covers an area of almost 1 ha, stretching 113 m in an east-west direction and 81 m north-south.⁵⁶ Inside the enclosure, four blocks consisting of a repetitive pattern of barrack-style units have been found; these are separated from the enclosure and from each other by a system of streets (Figure 8.12).⁵⁷ The interior is filled with mud-brick buildings that are characterized by five elongated rooms of identical size, fronted by an open courtyard (Figures 8.12 and 8.13).⁵⁸ The courtyard was accessible from the street. While the blocks to the eastern and western sides of the settlement consist of five barrack-style units in a row, the two blocks in the center are made of a double row with five units each. Therefore, a total of thirty individual units can be reconstructed for the whole site (Figure 8.12). A street ran along the inside of the enclosure wall, and there were two main entrances to the settlement lying in the center of the northern and southern enclosure wall segments. In an earlier building phase before the erection of the enclosure wall, a sinusoidal screen wall had surrounded the settlement area; this was later paved over with the mud bricks of the street that ran along the interior of the enclosure wall (Figure 8.16).⁵⁹

This architectural layout, with its strict orthogonal organization of repetitive building modules, is good



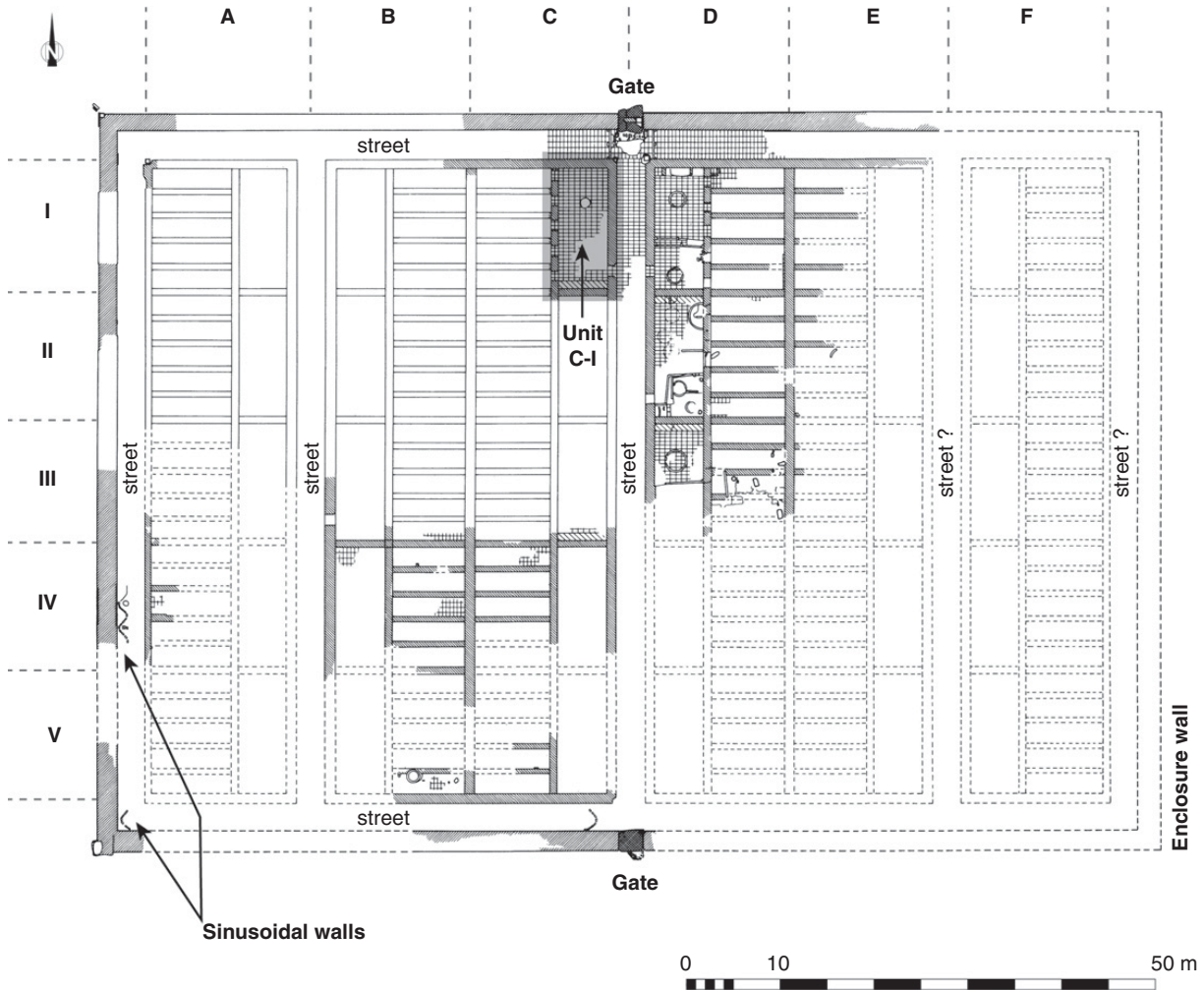
8.10. Satellite view of the northern part of the Fayum depression showing the position of Qasr el-Sagha. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, after J. Šliwa, “Qasr el-Sagha. Studies in the Middle Kingdom and the Second Intermediate Period Settlements in 1979–1985,” *Fontes Archaeologici Posnanienses* 36 (1988), fig. 1.



8.11. Satellite view of the settlements in relation to the temple of Qasr el-Sagha. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after J. Śliwa, “Die Siedlung des Mittleren Reiches bei Qasr el-Sagha. Grabungsbericht 1983 und 1985,” *MDAIK* 42 (1986), 168, Abb. 1.

evidence for the Western Settlement being an official foundation. However, its purpose is less obvious when investigating the material culture from within these dwellings: there is nothing that indicates activities that fall within the sphere of “official business,” such as administration, any important production, or manufacturing activities. The objects found during the excavation of several building units provide evidence for general household activities such as food production and small-scale manufacturing activities, none of which provide any clear indications about the purpose of the settlement and its inhabitants.⁶⁰ Śliwa deduced from the occupational traces that the courtyard was used for domestic activities, including food preparation, which is also witnessed by the installation of at least one oven in this area for each of the barrack-style units. The five rooms at the back might have been used for sleeping.⁶¹ All the floors had been constructed with a single layer of mud bricks that was covered by a layer of muna (mud plaster) 2–3 cm thick, which formed the actual walking surface.⁶² The lack of any phases of floor renewal, which would have been

visible in the form of multiple phases of muna coating, strongly suggests that these buildings did not see long-term use.⁶³ Door sockets made of stone have frequently been found at the entrances to the elongated rooms, but apart from those, architectural stone elements remain rare. The oven installations in the courtyard (Figures 8.14 and 8.15) show evidence for bread production that can be witnessed by the accumulation of tubular bread-mold fragments being scattered here, as well as large amounts of ash that had accumulated in corners of the courtyards.⁶⁴ Excavations in one of the units (C1) have provided evidence for the presence of a bench along the southern end of its courtyard (Figure 8.13).⁶⁵ In another courtyard, pieces of faunal remains confirm food preparation activities. The analysis of those faunal remains points to a prevalence of fish, some sheep/goat, and occasional cattle bones.⁶⁶ Other finds in these units consist of flint chips, knives, sickle blades, and pottery, which are typical for daily household activities, including some manufacturing work on a small scale, and do not provide any evidence for the function of this

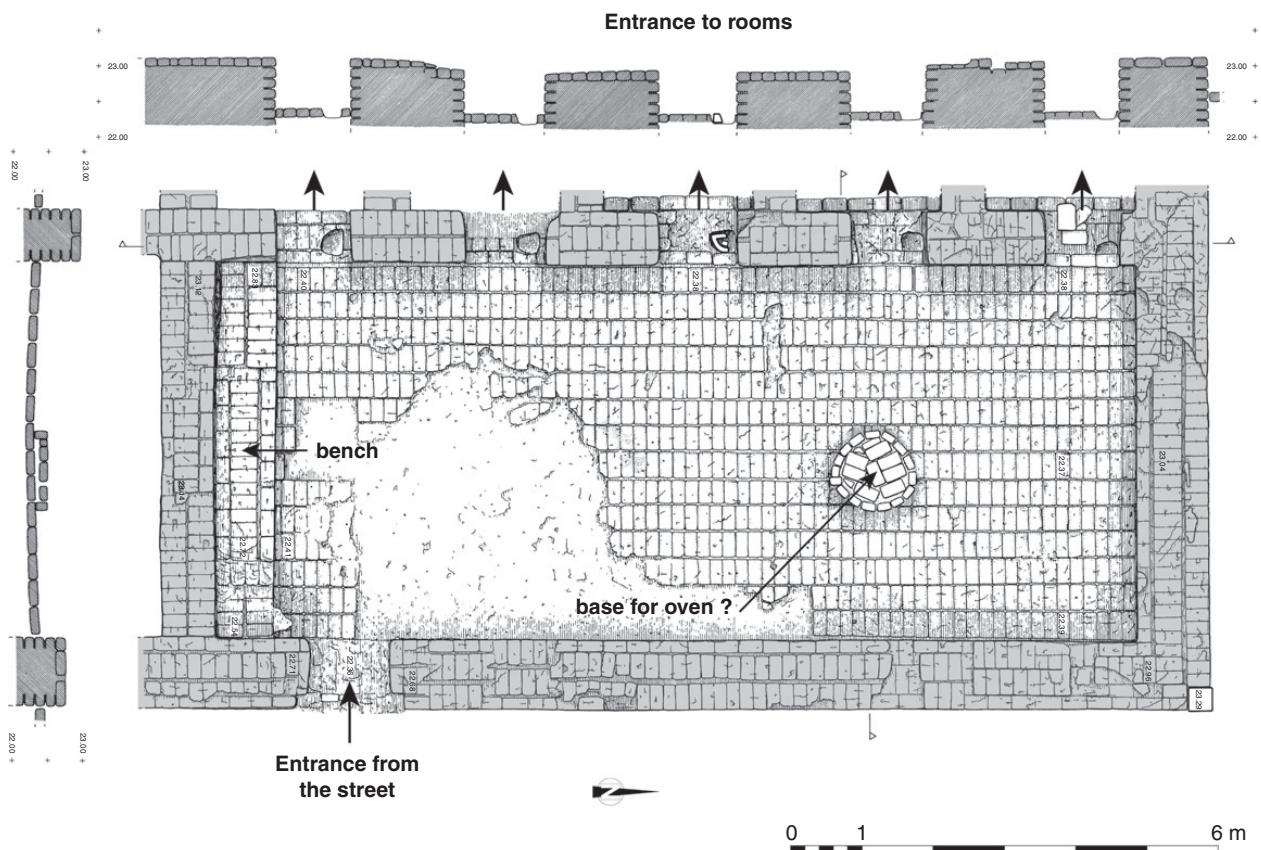


8.12. Plan of the Western Settlement at Qasr el-Sagha. By G. Marouard, after J. Šliwa, “Die Siedlung des Mittleren Reiches bei Qasr el-Sagha. Grabungsbericht 1987 und 1988,” *MDAIK* 48 (1992), 179, Abb.1.

settlement.⁶⁷ In some cases, small dividing mud-brick walls were added within the courtyards, but these are the only signs of internal alterations at this site.

During the excavation of two test squares at the site, some evidence was noted for two distinct phases of occupation.⁶⁸ The earlier one is characterized by pottery dating to the Twelfth Dynasty, which also included some pieces of Nubian sherds belonging to the Pan-Grave culture.⁶⁹ The second, later phase dates to the late Thirteenth Dynasty and probably continued into the Second Intermediate Period.⁷⁰ Several fragments were found of Tell el-Yahudiya juglets, belonging, according to the recent typology established by Manfred Bietak, to the “classic phase” dated to the late Thirteenth Dynasty.⁷¹

Estimates have been made as to the number of inhabitants, which according to Šliwa could have comprised 40 persons per barrack-style unit, suggesting about 8 persons for each elongated room.⁷² He concludes that a maximum of about 1,200 persons might have been housed in the Western Settlement, which he interprets as a workers’ town. In a recent publication, Šliwa discusses the possibility that this site could have been a *kheneret* institution, a kind of “forced labor” camp.⁷³ Nevertheless, the function of the Qasr el-Sagha settlements and the principal occupation of the people who lived there remain difficult to establish. Šliwa’s estimate concerning the overall number of inhabitants seems to be somewhat exaggerated when applying the 6 m²–10 m² per person per household hypothesis first established by



8.13. Courtyard of Unit C-I, Western Settlement at Qasr el-Sagha. After J. Šliwa, “Die Siedlung des Mittleren Reiches bei Qasr el-Sagha. Grabungsbericht 1987 und 1988,” *MDAIK* 48 (1992), 181, Abb. 2.



8.14. View of the courtyard of Unit C-I, Western Settlement at Qasr el-Sagha. After J. Šliwa, “Die Siedlung des Mittleren Reiches bei Qasr el-Sagha. Grabungsbericht 1987 und 1988,” *MDAIK* 48 (1992), Taf. 40a. Courtesy of J. Šliwa.



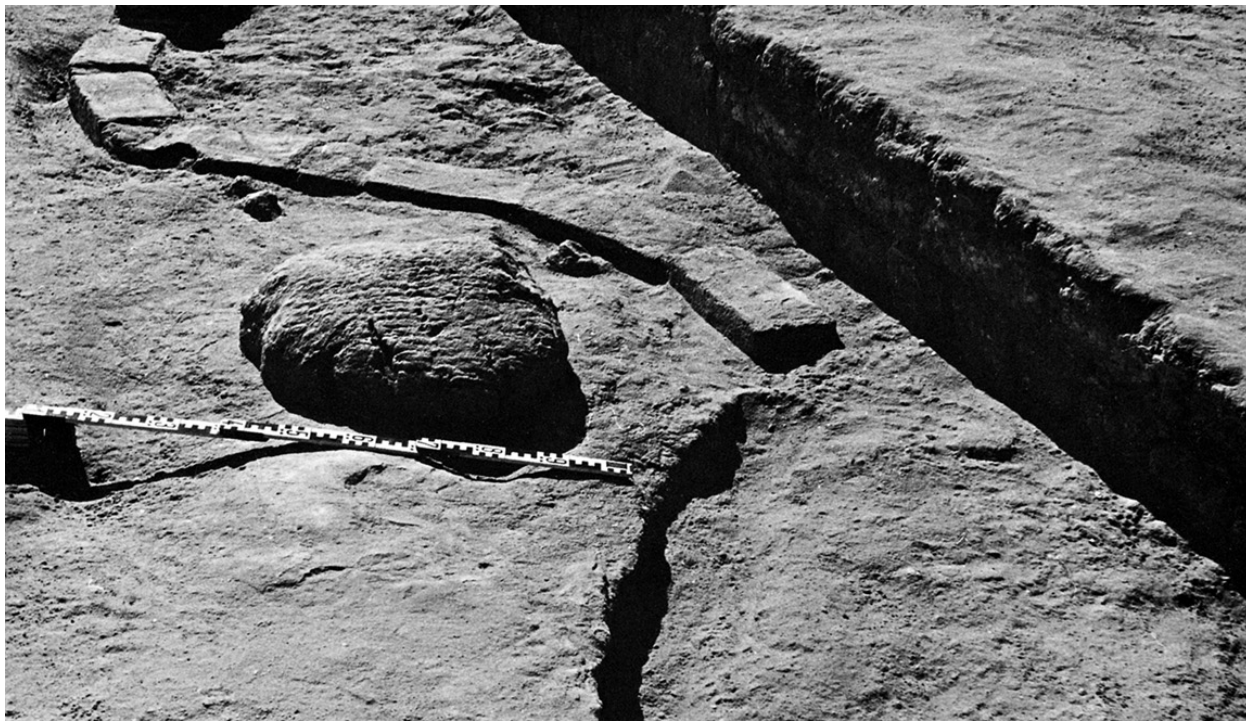
8.15. Detail of the northern part of the courtyard of Unit C-I, Western Settlement at Qasr el-Sagha. After Šliwa, “Die Siedlung des Mittleren Reiches bei Qasr el-Sagha. Grabungsbericht 1987 und 1988,” *MDAIK* 48 (1992), Taf. 41a. Courtesy of J. Šliwa.

Naroll to the size of the barracks at Qasr el-Sagha.⁷⁴ Using the latter calculation, 15–20 persons could have occupied each of the housing units, a much more feasible number, especially with regard to the size of the courtyard and its food production facilities. The total settlement would have then housed about 450–600 persons when fully occupied. The presence of one or two ovens and the absence of any storage facilities such as smaller silos, for example, seem to confirm this observation. While the elongated rooms look like barracks and could have housed more people, the courtyards in front seem rather small for 40 people, the number suggested by Šliwa.⁷⁵ As Mark Lehner’s excavation of the Old Kingdom gallery complex at Heit el-Ghurab in the Giza region has shown, a barrack-style complex providing accommodation for a large number of individuals necessitated the presence of a large-scale food supply system, for which storage facilities and food production areas such as bakeries and granaries existed at that site. Lehner estimated that each gallery, which had a floor space of about 168 m², could have housed 40 persons for sleeping.⁷⁶ The settlement at Qasr

el-Sagha does not provide any evidence for supplying more than 1,000 people with the necessary foodstuffs. There is neither evidence for larger cooking installations nor for any debris suggesting the large-scale supply of food items. Thus, a lower number of inhabitants, as indicated above, seems much more plausible.

The Eastern Settlement was found in a bad state of preservation, and therefore archaeological work only focused on several test trenches (Figure 8.11).⁷⁷ There is no evidence for any particular orthogonal layout, and the settlement stretched for about 140 m in an east–west direction and 100–120 m north to south, forming a roughly oval shape.⁷⁸ No evidence for any mud-brick structures was uncovered during the fieldwork in this area, which has been explained by heavy wind erosion.⁷⁹ To the south of the Eastern Settlement area lies a stone-covered mound that has been interpreted as part of its fortification system, although this is highly unlikely given its different orientation.⁸⁰

As mentioned, the settlement is lacking any orthogonal layout, and its precise purpose is unknown. While there



8.16. Sinusoidal wall remains close to the enclosure wall of the Western Settlement at Qasr el-Sagha. J. Šliwa, “Die Siedlung des Mittleren Reiches bei Qasr el-Sagha. Grabungsbericht 1983 und 1985,” *MDAIK* 42 (1986), Taf. 24 a, b. Courtesy of J. Šliwa.



8.17. Upper part of an unfinished female statuette in basalt found at the Eastern Settlement QS VIIH/80 at Qasr el-Sagha. After J. Śliwa, “Qasr el-Sagha. Studies in the Middle Kingdom and the Second Intermediate Period Settlements in 1979–1985,” *Fontes Archaeologici Posnanienses* 36 (1988), fig. 48. Courtesy of J. Śliwa.

seems to be a higher quantity of stone-working tools present at this site in comparison with the Western Settlement⁸¹ – such as numerous examples of crescent drills used for stone vessel production – clear evidence for a stone workshop was only identified along its eastern side, on the fringes of the settlement (site QS VIIIF/80; see [Figure 8.11](#)).⁸² A number of stone tools and some unfinished sculpture fragments indicate the manufacturing of small stone figurines made of basalt and limestone, which are typical for objects used for the funerary or temple cults ([Figure 8.17](#)).⁸³ However, it is not possible to determine the purpose of the settlement from this discovery alone, especially since the workshop area was situated along the edge of the Eastern Settlement and does not seem to be representative for the remainder of this site.⁸⁴ The test squares that were excavated provided enough pottery data to establish the chronological range for the occupation of this site, which corresponds to the same period as the Western Settlement (see [Figure 8.11](#)).⁸⁵ Most of the ceramic evidence recovered during this fieldwork dates to the Twelfth Dynasty. It is possible that this site had been founded slightly earlier than the Western Settlement.⁸⁶ The lack of architectural remains is a problem for any further consideration with regard to its function, and the surface collection of pottery and stone tools is not enough for establishing its exact role within the region of Qasr el-Sagha. Śliwa has tentatively proposed the identification as a production site with an economic role.⁸⁷

Further considerations as to the role of these two sites within the northern Fayum region are worth exploring in connection with other features such as the nearby temple, the cemetery, and the more distant basalt quarries.

The date of the Eastern and Western Settlements is relatively securely fixed to Middle Kingdom and Second Intermediate Period, which makes them contemporary to the unfinished stone temple. Also located in the vicinity, to the west of the temple, lies a Middle Kingdom cemetery consisting of rock-cut tombs that has been severely looted ([Figure 8.11](#)).⁸⁸ An association of all of these four sites seems inevitable. In addition, Śliwa and his colleagues postulated that the two settlement sites were related to the exploitation of the basalt quarries at Widan el-Farras/Gebel el-Qatrani. Basalt fragments have been found especially in the Eastern Settlement, which made Śliwa conclude that both settlements were linked to quarrying activity.⁸⁹ The western site would have specifically housed the workers, who could have been part of a so-called *kheneret* labor camp, while the Eastern Settlement was a production site making use of stone materials, as can be witnessed in the workshop area.⁹⁰

However, this hypothesis remains problematic for several reasons. The objects recovered from the Western Settlement and the care that went into the construction and layout of the whole site, with its well-prepared mud-brick floors and protective stone corners on the enclosure wall, are not features that are typically encountered in relation to a mining site. As Ian Shaw outlined in his study of quarry sites, during the Old and Middle Kingdoms, the installations near quarries were relatively simple, with almost no traces of anything else beyond stone tools and pottery.⁹¹ Locally available building material was usually used for the construction of the buildings, and little effort was made for careful floor preparation, for example. More-distant sites directly related to quarrying activity are unknown.



8.18a. Stone-revetted mound on the eastern side of the Western Settlement at Qasr el-Sagha. After Di. and Do. Arnold, *Der Tempel Qasr el-Sagha*, AV 27, 1979, Taf. 18a. © Deutsches Archäologisches Institut, Kairo.



8.18b. Details of the stone-revetted mound. After Di. and Do. Arnold, *Der Tempel Qasr el-Sagha*, AV 27, 1979, Taf. 18b. © Deutsches Archäologisches Institut, Kairo.



8.18c. L-shaped ridge with stone cover 700 m south of the Qasr el-Sagha temple. After Di. and Do. Arnold, *Der Tempel Qasr el-Sagha*, AV 27, 1979, Taf. 18 c. © Deutsches Archäologisches Institut, Kairo.



8.18d. Basalt fragments at the southern end of the quarry road. After Di. and Do. Arnold, *Der Tempel Qasr el-Sagha*, AV 27, 1979, Taf. 18d. © Deutsches Archäologisches Institut, Kairo.

Furthermore, archaeological fieldwork and surveys at the basalt quarries and along the preserved stretches of the quarry road have provided good evidence for Old Kingdom exploitation, which is further corroborated by the quay structure at the end of the quarry road that lies in the vicinity of the Qasr el-Sagha installations (Figure 8.18d). The quay was covered by a multitude of basalt fragments, and surface pottery collected along the quay dates to the Old Kingdom and Roman periods, corresponding well to the evidence from the quarries at Widan el-Farras.⁹² No evidence for any Middle Kingdom exploitation of basalt in this area has been found thus far.

This is not surprising, because the use of basalt during that time for any royal building projects is almost nonexistent; the case is quite different for the Old Kingdom, as has been indicated previously. The presence of some unfinished basalt figurines in the Eastern Settlement is insufficient evidence for a direct link to the basalt quarries at Widan el-Farras, because such fragments can be found in considerable quantity in the Qasr el-Sagha region, especially on top of the quay structure and numerous revetted hillocks in this area. A simple surface collection of such basalt fragments could easily have provided the raw material for making the figurines, without necessitating large-scale quarrying work; also important is the fact that basalt

was not the only stone used in this workshop installation. In addition, it is estimated that the lake level for the Fayum during the Middle Kingdom might have been 5 m lower than during the Old Kingdom.⁹³ If proven correct, this could have had certain consequences for the transportation of basalt by boat across the lake and through the Hawara Channel to the Nile. While this seems to have been the *modus operandi* during the Old Kingdom, as witnessed by the long quay strewn with basalt fragments at the terminal point of the quarry road (Figure 8.18d), a lower lake level would have severely affected the link between the Fayum lake and Nile Valley.⁹⁴

Thus, the evidence brought together here shows clearly that any connection between the Middle Kingdom settlements and the quarry exploitation does not hold. However, a connection to the temple and nearby cemetery seems plausible. The character of the Eastern Settlement suggests the existence of a production area of some kind, which can be witnessed by the finds of stone tools, unfinished stone objects, and also pottery. No mud-brick architecture has been excavated in this area, and its absence has been explained by wind erosion. Šliwa points out that it is possible that the people were using the Western Settlement as accommodation while manufacturing activities were carried out in the Eastern Settlement.⁹⁵ Although this does not explain the role of the temple and the presence of the settlements within this region, it is very likely that it played some role in the general effort initiated by the state to take control of more marginal regions in the Nile Valley and the Delta, with the overall aim of enhancing agricultural exploitation.⁹⁶ The late Twelfth Dynasty rulers had certainly taken major steps to increase agricultural activities in the Fayum region, but whether the Qasr el-Sagha area was part of this undertaking or not is difficult to establish with much certainty. The temple might have been intended to establish a long-term settlement, which would have been comparable to the Middle Kingdom temple at Ezbet Rushdi in the Tell el-Dab'a region. The fact that the temple was left unfinished and the settlement never developed beyond its initial form of foundation is striking. The temple and the necropolis with the rock-cut tombs are two elements that strongly suggest that there could have been an intention to establish a permanent settlement – possibly even of urban character – in this northern region of the Fayum. This would have been part of the general efforts of the Twelfth Dynasty to develop the exploitation of the fertile landscape around the lake.

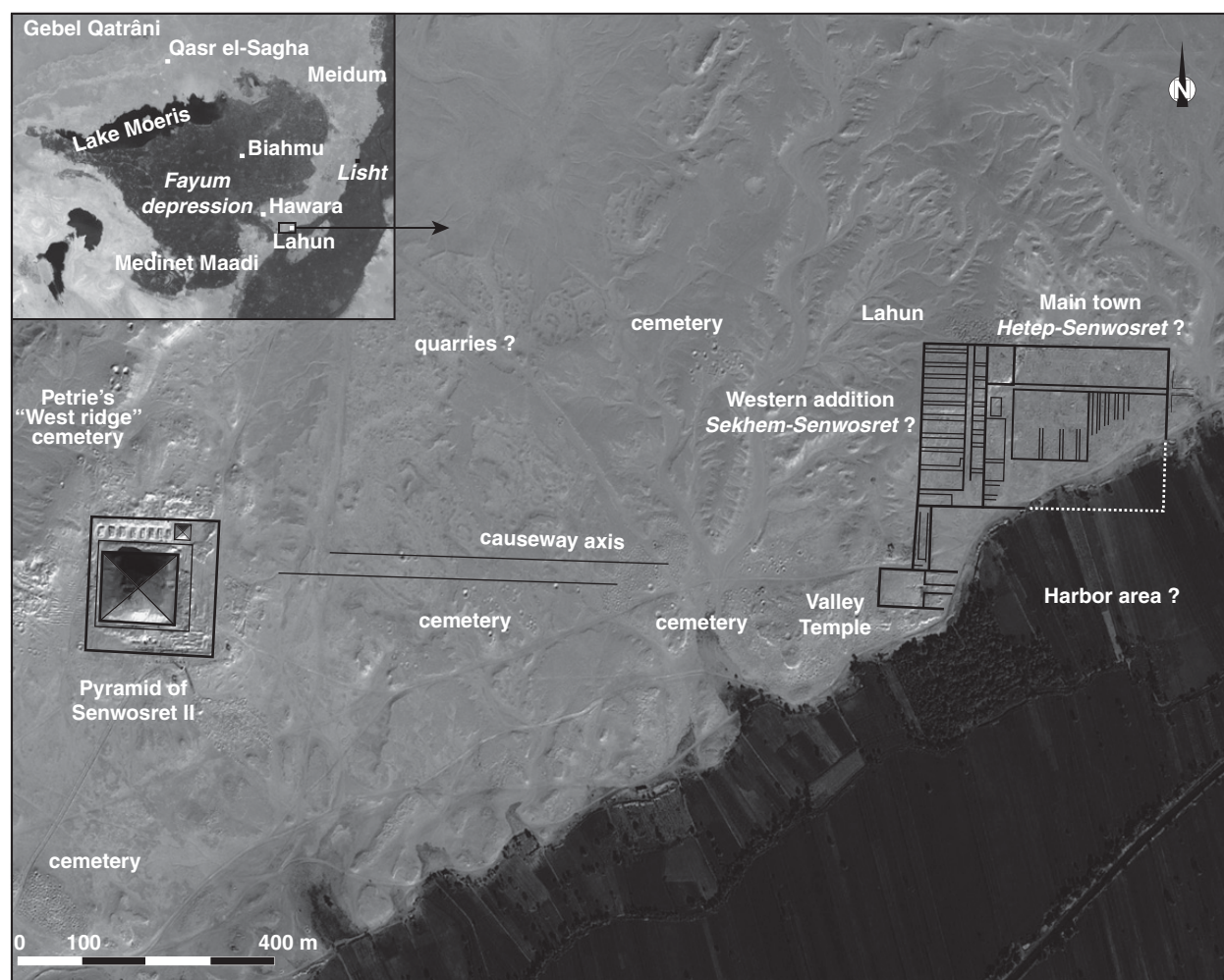
For an unknown reason, this settlement project was never completed and/or did not take off.

Thus, the region of Qasr el-Sagha provides additional evidence for the interest and investment of the Middle Kingdom rulers in this rather remotely located region along the northern shore of the Birket Qarun lake. The archaeological evidence compares well with the two state-founded sites in the Tell el-Dab'a region, as described previously. None of these sites fall into the category of urban settlements but rather belong to the group of specialized state foundations built with a precise function in mind. It is not always possible to understand how permanent the occupation of such settlements was intended to be, but the archaeological evidence from the Western Settlement at Qasr el-Sagha and the planned site in Area F/I at Tell el-Dab'a favor a rather short lifetime. Little is known about the inhabitants who were sent to occupy these structures, and not much can be learned from the associated finds.

8.2.4 Lahun – a state-founded town in proximity to the Fayum region

8.2.4.1 *General setting and history of exploration*

The well-known town of Lahun, which is one of the best-known settlements of the Middle Kingdom, is situated along the western edge of the Nile Valley, in the vicinity of the entrance to the Fayum region (see Figure 8.19).⁹⁷ It was founded along the desert edge on a relatively flat but uneven and slightly sloping surface marked by a small rock outcrop termed “acropolis,” which can be seen on the northern side. The site was excavated first by William Flinders Petrie during two major seasons, in 1889 and 1890, and yielded not only an almost-complete plan of the settlement but also a rich assemblage of finds. These included a considerable number of papyri and clay sealings, which shed new light on the administration of such a settlement and its inhabitants, as well as many “objects of daily life” (tools, household items, pottery, etc.). A large number of those were given to the Petrie Museum of Egyptian Archaeology at University College, London.⁹⁸ The German scholar Ludwig Borchardt carried out further work at the site in form of a two-week survey in 1899 after the appearance of additional papyri from Lahun on the antiquities market.⁹⁹ In the waste deposit north of the Valley temple, he found numerous papyri dealing specifically with the administration of the temple.¹⁰⁰ Borchardt, who had



8.19. Satellite view showing the location of Lahun and its relation to the pyramid of Senwosret II. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe.

been trained as an architect, also left detailed notes about architectural observations of the townsite, in addition to many photographs, all of which form a useful complement to Petrie's reports.¹⁰¹ Petrie returned briefly to Lahun in 1920 to investigate a few selected areas at the site that had escaped his attention previously.¹⁰² Almost seventy years later, in 1989, Nicholas B. Millet from the Royal Ontario Museum and the University of Toronto was granted the concession of Lahun. He and his team conducted several seasons at the site until 1997.¹⁰³ Renewed interest has recently been shown by a Hungarian team led by Zoltán Horváth from the Museum of Fine Arts in Budapest, who has been doing survey work at Lahun since 2008.¹⁰⁴ Their work has focused specifically on the Valley temple area, and they were also able to produce a new topographic map of the Lahun region that covers about 800 ha.¹⁰⁵ In 2010, an

Egyptian mission headed by Abdel Rahman el-Aydi discovered four cemeteries in this area, one of which dates to the Middle Kingdom and contained at least thirty-one tombs of the Eleventh and Twelfth Dynasties.¹⁰⁶

The generally accepted interpretation of Lahun is that it was founded as a special-purpose settlement for the housing of the personnel and families who were in charge of the upkeep of the royal mortuary cult of Senwosret II. His funerary complex and pyramid lie about 1.1 km to the west of the settlement, in an area marked by quarries and rock-cut tombs, not all of which are contemporary to the Middle Kingdom (Figure 8.19).¹⁰⁷ A cult chapel had been attached to the eastern side of the pyramid, and along its northern side is a row of solid mastabas that do not have burial shafts – a kind of “dummy” structure – and a small satellite pyramid. Several burial shafts without marked

superstructure were found on the southern side. The whole complex had been enclosed by a mud-brick wall and a series of tree pits.¹⁰⁸

Only a few traces of the Valley temple of Senwosret II's pyramid complex have been found, and these are situated next to the southwestern corner of the settlement (see Figure 8.19). The temple complex had its own mud-brick enclosure wall, which had been lined with limestone slabs; the stone blocks of the temple were dismantled in antiquity in order to reuse them. This activity led to the almost complete disappearance of any structural elements there.¹⁰⁹ The long causeway linking the Valley temple to the eastern side of the pyramid complex is the longest example from a Middle Kingdom royal funeral complex. It seems to have never been fully constructed and might have only been partially completed, because there is no evidence for any pavement or roofing.¹¹⁰

8.2.4.2 *The layout of the town*

The plan of the site, first established by Petrie, has up till now been the main source of information concerning any interpretation of the layout and function of this important settlement. The notes by Borchardt and the Canadian mission, however, contributed several new elements that have much to add for a better understanding of this town. In addition, several satellite images have revealed new information concerning the overall size and layout of the Lahun settlement (Figure 8.20).¹¹¹

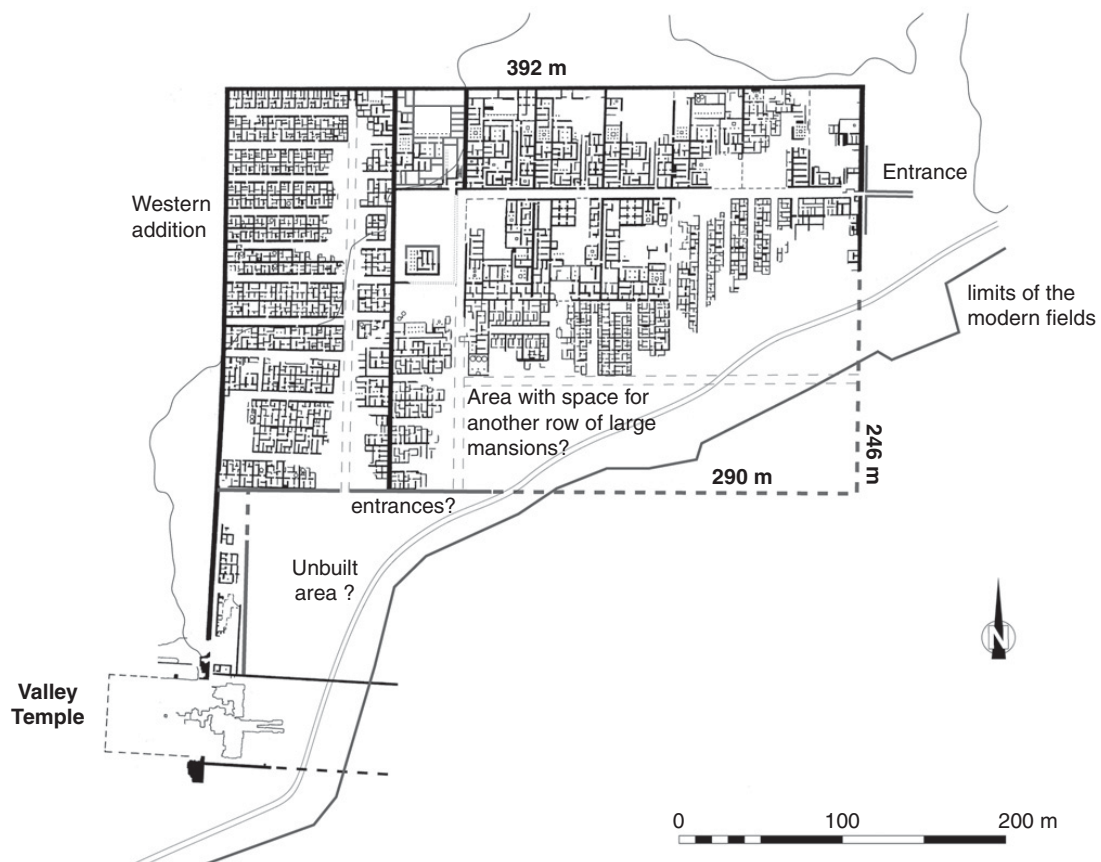
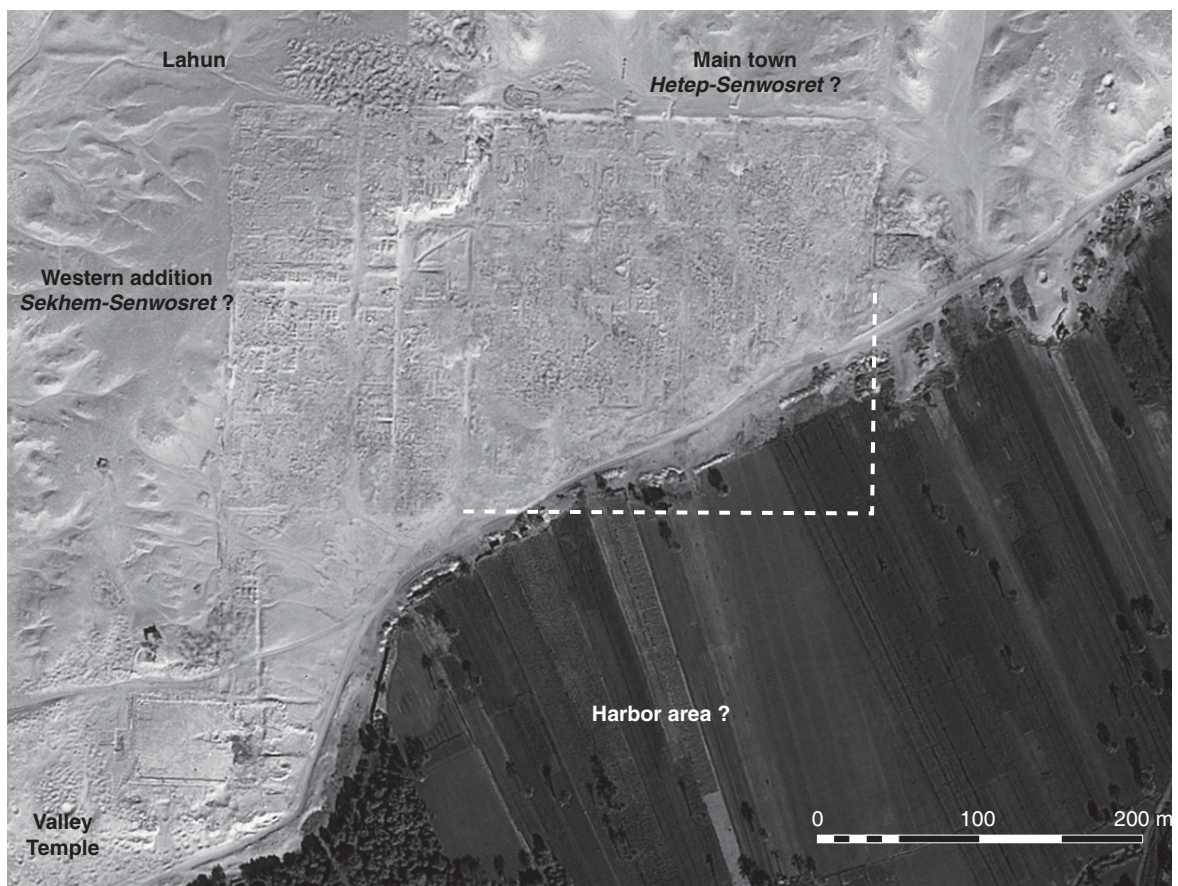
Petrie's plan shows a town that was not only aligned to the cardinal points but consisted of a strictly orthogonally organized layout of houses of different sizes with façades that aligned perfectly along the various streets. The main gate to the town was on the eastern side, which led to one of the principal streets running east to west. On each side of this street, large mansions, in a row and with almost identical ground plans, have been excavated. The northern row consists of seven mansions, while on the other side of the street, three or possibly four additional mansions can be recognized (Figure 8.20). Much of the rest of the town is filled with small, uniformly laid-out houses that stand in stark contrast to the large mansions.

The whole settlement was surrounded by a mud-brick enclosure wall of about 3.25 m in width that served more for marking the limits of the town than adding to its fortification.¹¹² No traces of any settlement expansion or production areas have been detected on the exterior of the walled town.¹¹³ A substantial north-south wall with a thickness of 3.18 m divides the settlement into

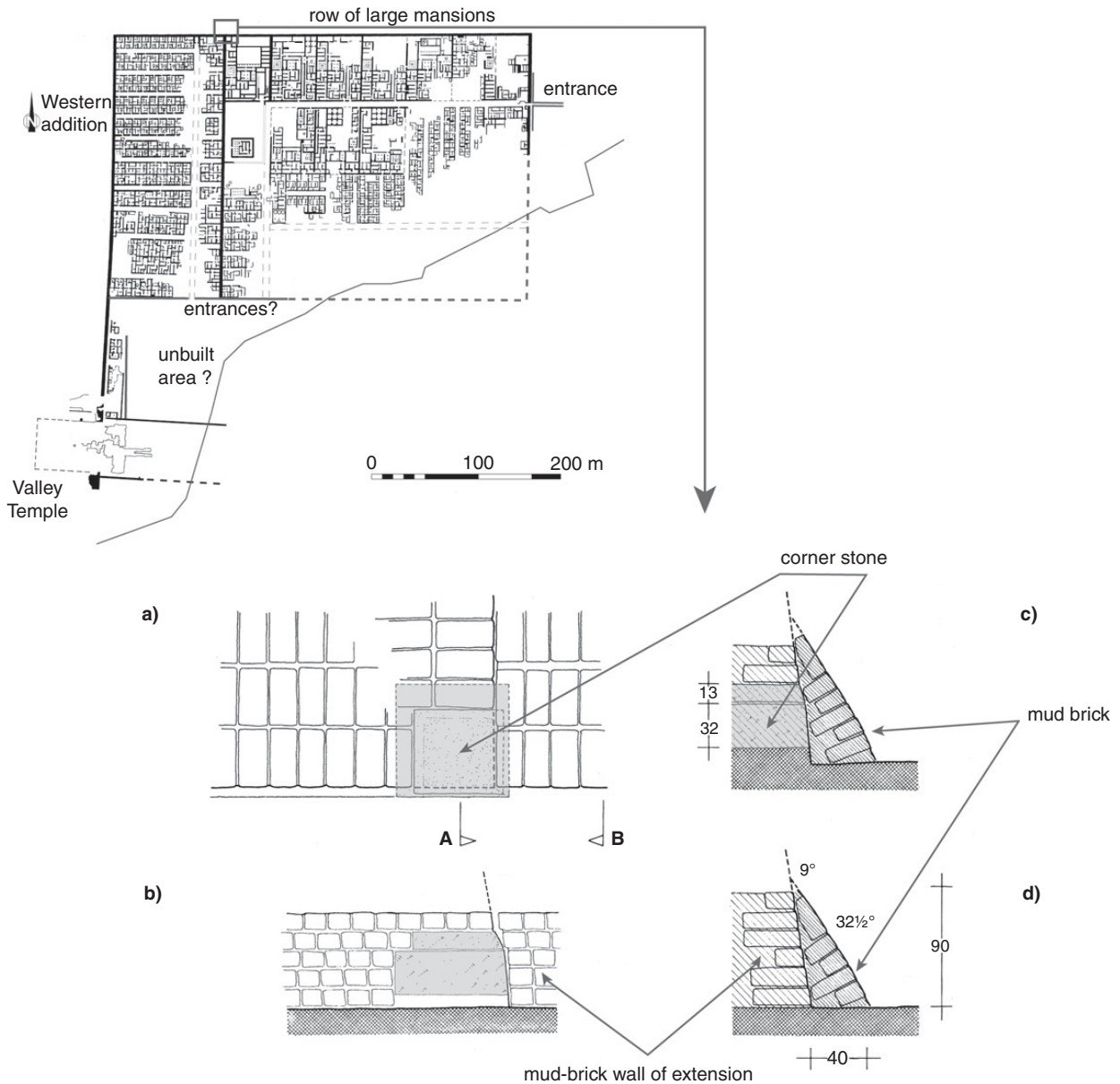
two parts: the larger eastern one and a more narrow western one (see Figure 8.20). This internal division has received much scholarly attention, especially in view of its purpose and the impression that it restricted inhabitants' access between the two parts of the town. From Borchardt's notes, it is possible to learn that a cornerstone had been inserted into the mud-brick enclosure at the northwestern angle where the dividing wall runs south (Figure 8.21).¹¹⁴ This proves that the settlement was constructed in two phases: first the larger eastern part, following an almost-square layout, while the western area is a secondary addition. However, this does not necessarily imply that the western part of the town was a much later addition to the original foundation in the east, and Petrie pointed out that the objects found in the western part of Lahun do not seem to show a chronological difference to those from the rest of the town.¹¹⁵ This is also the case for the brick sizes used for both enclosures, which are roughly the same.¹¹⁶ The construction of the new enclosure led to an expansion of the settlement to the west and physically separated the new town quarter from the remaining settlement. The exact purpose of this dividing wall, for which no gate or opening facilitating movement between these two areas has been found, is certainly striking and needs an explanation.

On Petrie's plan, the lower southeastern corner of the site is missing, and this part of the town had been lost due to erosion and modern agriculture. The common reconstruction so far has been that the entire settlement had a roughly square layout measuring 360 m in a north-south direction and 390 m from east to west.¹¹⁷ On recent satellite images using Google Earth™, it is possible to recognize the traces of the original extent of the town to the south, even in those areas where the enclosure wall has been missing. New evidence from satellite images of the site shows a distinct line along the southern side of the last row of houses that were drawn on Petrie's plan; it aligns perfectly across the whole site from east to west (Figure 8.20) and appears to mark the last row of houses of the main settlement area.

This limit is further corroborated by the fact that there seems to be a large open space to the south, without any structures except for several buildings next to the Valley temple complex that form a thin row on the western side. Also noteworthy is the fact that while none of the east-west streets and rows of houses in the western part of the town align well to those of the eastern part, the southernmost row in each area stops at exactly the same level (see Figure 8.20). Another argument in favor of this



8.20. Satellite view and plan of Lahun and its relation to the Valley temple of Senwosret II. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after B. J. Kemp, *Ancient Egypt. Anatomy of a Civilization*, London/New York, 1989, 150, fig. 53.



a) Plan of the original north-west corner of the town enclosure wall at Lahun

b) View of the corner stone from the north

c) Profile A through the corner stone of the town enclosure wall

d) Profile B through the enclosure wall of the town extension

8.21. Details of the northwest corner recorded by Ludwig Borchardt. By G. Marouard, after F. Arnold, "Baukonstruktion in der Stadt Kahun. Zu den Aufzeichnungen Ludwig Borchardts," in P. Janosi (ed.), *Structure and Significance*, Vienna, 2005, 82, Abb. 4a–d.

adapted layout of Lahun concerns the proportions of various housing blocks. On Petrie's plan, the northernmost row of buildings, which is occupied by the large mansions, is separated by an east–west street from the

southern row of mansions and houses. Additional smaller houses are abutting the southern limit of these mansions without being separated by another street. Another street parallel to the main street farther north is indicated on the

satellite image by the alignment of the southern end of small houses below the southern row of mansions. In addition, a small part of such a possible street can be identified on the satellite image toward the center of the settlement (see Figure 8.20). This would then leave some space with almost the exact proportions and dimensions of the northern row of mansions on the southern side of the town. Such a symmetric layout fits very well with the rigid orthogonally planned settlement layout of the whole site. As a result of these observations that can be made using the satellite views of Lahun, it is now possible to reconstruct the size of the town at about 9.5 ha, stretching for about 390 m east to west and only 244 m in a north–south direction, which is slightly smaller than previously assumed (Figure 8.20). However, this also means that less of the site has been lost, with only about one-third of it missing instead of almost one-half according to the previous reconstruction.

8.2.4.3 *The function of the north–south dividing wall at Lahun*

A puzzling feature of Lahun is the thick wall that divides the site into two distinct settlement areas. One of the first explanations brought forward to explain this division suggested social reasons, such as the new settlement area being intended as a dwelling place for inhabitants of the lower levels of society or workmen and the wall being used to keep them segregated from the elite inhabiting the much larger mansions or villas to the east.¹¹⁸ This fits relatively well with the internal layout of the western town quarter, which is characterized by almost uniformly laid-out small houses arranged in double rows and built back to back. It was originally made up of about 150 house units and seems to have been densely settled (Figures 8.26). This hypothesis, however, fails to explain the large number of similarly small houses in the eastern part of the site. Along the same lines, it is necessary to ask if the western extension had simply been a measure to answer to the demands of a growing population, but in such a case it is hard to understand why the former western enclosure wall had not been dismantled in favor of the new enclosure wall farther to the west. At other settlement sites in Egypt, such developments can be traced in the archaeological record, and enclosure walls were frequently dismantled and rebuilt according to changes in the size of a town. For example, at the Old Kingdom town of Elephantine, these phases of settlement expansion in relation to the town walls are clearly

traceable.¹¹⁹ At Lahun, the addition of the western part to the site did not lead to the dismantling of the former section of the town wall, which became a kind of separating feature within the site, running north to south (Figures 8.20 and 8.24). Quite the contrary, there is evidence for a second wall built against its outer face at a later time, meaning that it was deliberately kept in place and possibly renovated.¹²⁰ This certainly indicates that this wall fulfilled an important function for the general organization of the town. On Petrie's plan, it is possible to note that most of the houses of both parts of the settlement in the area of the dividing wall about this enclosure, making use of it as their rear wall (Figure 8.22).¹²¹ Using enclosure walls as a rear wall for buildings is a common phenomenon in ancient Egyptian towns and cities and presents an economic way of constructing new dwellings and storage facilities. If this had been the only reason for keeping this wall in place, then why is there no evidence for the inhabitants having created openings where there are streets, in order to improve the circulation between the eastern and western parts of the town? On the plan published by Petrie, no openings were marked (see Figure 8.22.)¹²²

These considerations strongly indicate a deliberate choice of keeping the older wall to divide the town. Some further indications as to a possible reason for this striking division within the town of Lahun can be found in the textual sources, which offer a good example of how archaeological data can be supplemented by textual material.

8.2.4.4 *Discussion of toponyms associated with the town of Lahun*

For a better understanding of the site's evolution and organization, in addition to the analysis of the archaeological evidence, further information from textual sources needs to be considered. The papyri and the sealings mention two different toponyms in relation to Lahun: Hetep-Senwosret and Sekhem-Senwosret. Several studies have assigned these two toponyms to different parts of the town.¹²³ The most recent investigation by Horváth brought together sufficient evidence to convincingly demonstrate that Hetep-Senwosret was the name of the larger eastern sector of Lahun, under control of a mayor who exercised the highest authority in the town. Sekhem-Senwosret refers to the western part of the town, which was closely linked to the cult of the deceased king at the nearby Valley temple.¹²⁴ While the mayor of



8.22. Plan of the western and the central parts of Lahun, showing the temple and the administrative areas. By G. Marouard, after C. Gallorini, "A Reconstruction of Petrie's Excavation at the Middle Kingdom Settlement of Kahun," in S. Quirke (ed.), *Lahun Studies*, Reigate, 1998, 49, fig. 3.

Hetep-Senwosret also had control of the temple administration and thus successfully combined secular and religious duties – typical for the mayoral position in any town administration during the Middle Kingdom – the western part of the settlement that was segregated from the main part by the mud-brick wall evidently functioned as an independent administrative unit at Lahun. This administrative distinction might have been the principal reason for keeping this town quarter separate from the rest of the settlement. Further information obtained from the documents also sheds light on the approximate timeline of the foundation and development of Lahun in general.

The initial foundation of the settlement might have coincided with the beginning of the construction work at the pyramid complex under Senwosret II. It would have housed the workers and staff administering this building work. It is equally possible that its original foundation had nothing to do with its later function as a pyramid town but rather had been intended as a royal estate for controlling and exploiting agricultural land in the region.¹²⁵ It could have then been transformed into a larger, more complex settlement supporting the upkeep of the royal mortuary complex in the vicinity when Senwosret II chose this area for his pyramid.¹²⁶ This suggestion has to remain speculative, and the facts might never be known, but the current evidence from both textual and archaeological sources strongly indicates that the two distinctly separated town areas are related to the administrative organization of the town and the timeline of its initial foundation and not necessarily to a social segregation within the community.

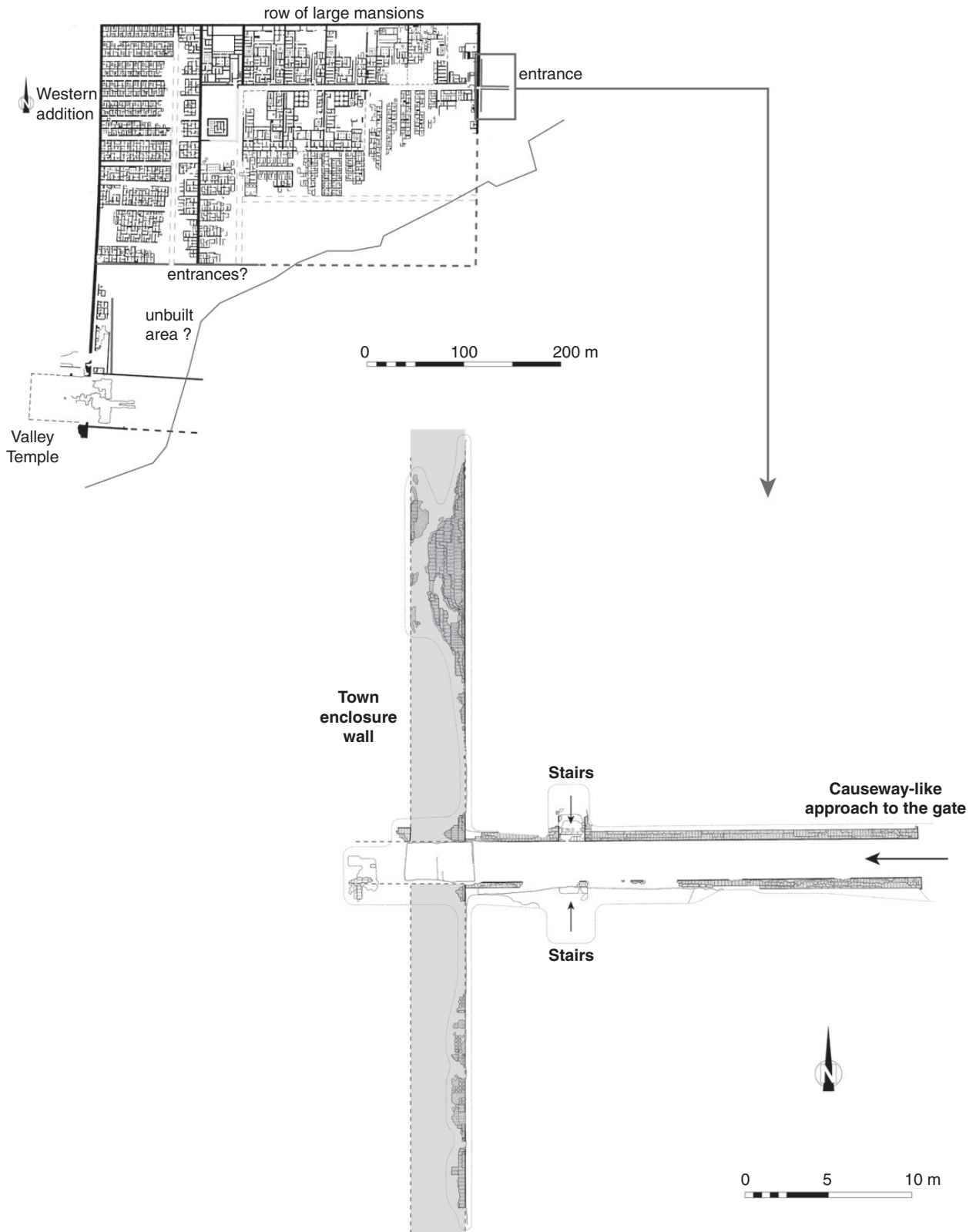
8.2.4.5 East–west street and east gate

The principal entrance to Lahun leading directly to the main street was situated on the northeastern side of the town enclosure. The recent reinvestigation by the Canadian mission has shown that the road leading up to the entrance from the outside was visibly marked by a thin mud-brick wall on each side, which gave it a kind of causeway-like appearance (Figure 8.23).¹²⁷ At about 5 m from the entrance gate, a gap on both sides has been discovered, cutting through the walls flanking the street and equipped with a small staircase on each side, leading to the north and south (see Figure 8.23). The exact purpose is unclear, but these doorways seem to have given access to the exterior space along the town wall and could have been used by guards for inspections and/or for deliveries that were destined for the granaries of the northern row of mansions.

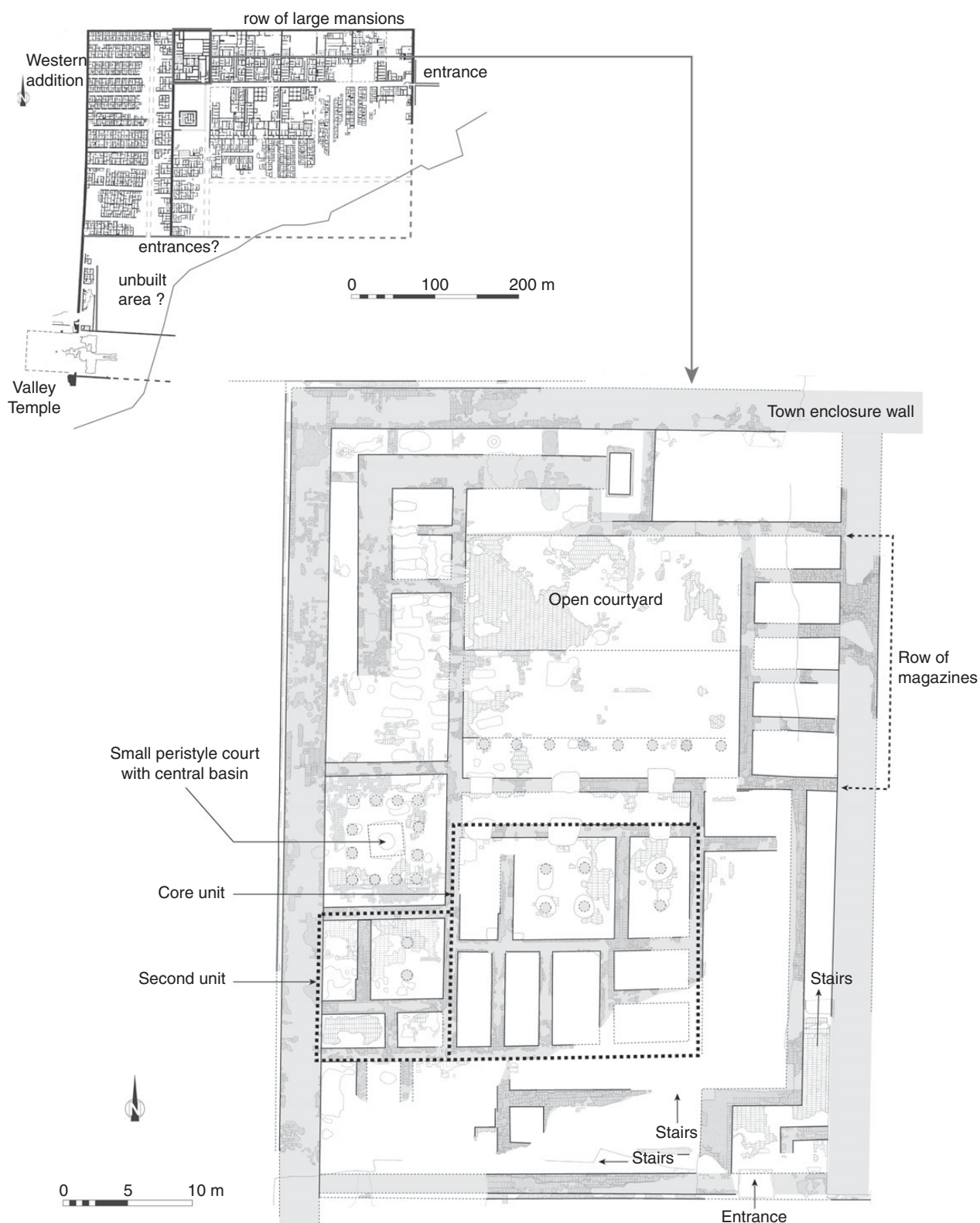
This causeway-like approach ends at the gate and leads into the main east–west street of the settlement. This street runs between the two rows of the largest Lahun houses, also identified as “villas” or mansions, that occupy, respectively, the northern and southern sides of the street, which ends in the west at the most prominent building of the settlement – the so-called acropolis (Figure 8.24). Because the southeastern part of the settlement has been completely destroyed by erosion and modern agriculture, Petrie was unable to obtain any archaeological data from this area. Therefore it is not clear whether there had been any additional entrance or gate on the southeastern side.

8.2.4.6 The “acropolis”

Petrie had originally identified the acropolis as a temporary royal residence, the place where the king would stay during his visits for inspecting the progress of the work at his mortuary complex.¹²⁸ The archaeological evidence does not confirm this hypothesis, but the elevated position of the building, situated on a natural limestone outcrop, clearly marks it as a structure of importance. The Canadian mission, in its recent investigation, focused part of its fieldwork on the acropolis and was able to complete Petrie’s plan by carefully cleaning the traces of mud-brick walls that were still visible.¹²⁹ Already during Petrie’s time, this building had suffered much from erosion. The new results show that it has a very similar layout to the other Lahun mansions (Figure 8.24).¹³⁰ Due to its prominent position within the settlement on the elevated rock outcrop – which had been cut into shape in order to produce a flat-enough surface for the foundation layers of the mud-brick walls – it is very likely that it would have been used by the local mayor, even though this was not confirmed further by any significant objects recovered there.¹³¹ The main east–west street ends directly in front of this elevated mansion and turns at a right angle to the south, forming the second main axis within the settlement (Figure 8.20). It cannot be a coincidence that the most prominent building of the town is located exactly at this turning point of the main street. A similar setup can be found for the location of the governor’s residence at Elephantine, which saw a long period of use from the end of the Old Kingdom until the Middle Kingdom.¹³² The main street through the town leads directly up to it in an eastern direction from the lower town gate on the southwestern side of the settlement. In front of the governor’s residence, the street turns at a right angle and leads to the



8.23. Detail of the main gate area at Lahun. By G. Marouard, after R. A. Frey and J. E. Knudstad, "The Re-Examination of Selected Architectural Remains at El-Lahun," *JSEA* 35 (2008), 66, fig. 45.



8.24. Wall remains of the “acropolis” at Lahun. By G. Marouard, after R. A. Frey and J. E. Knudstad, “The Re-Examination of Selected Architectural Remains at El-Lahun,” *JSSEA* 35 (2008), 53, fig. 34. Copy of original plan courtesy of Z. Horváth.

temple of Satet in the north (Figure 8.40). Thus, the planning that went into the foundation of Lahun clearly followed a similar organization in which the main streets lead to the most important buildings in town.

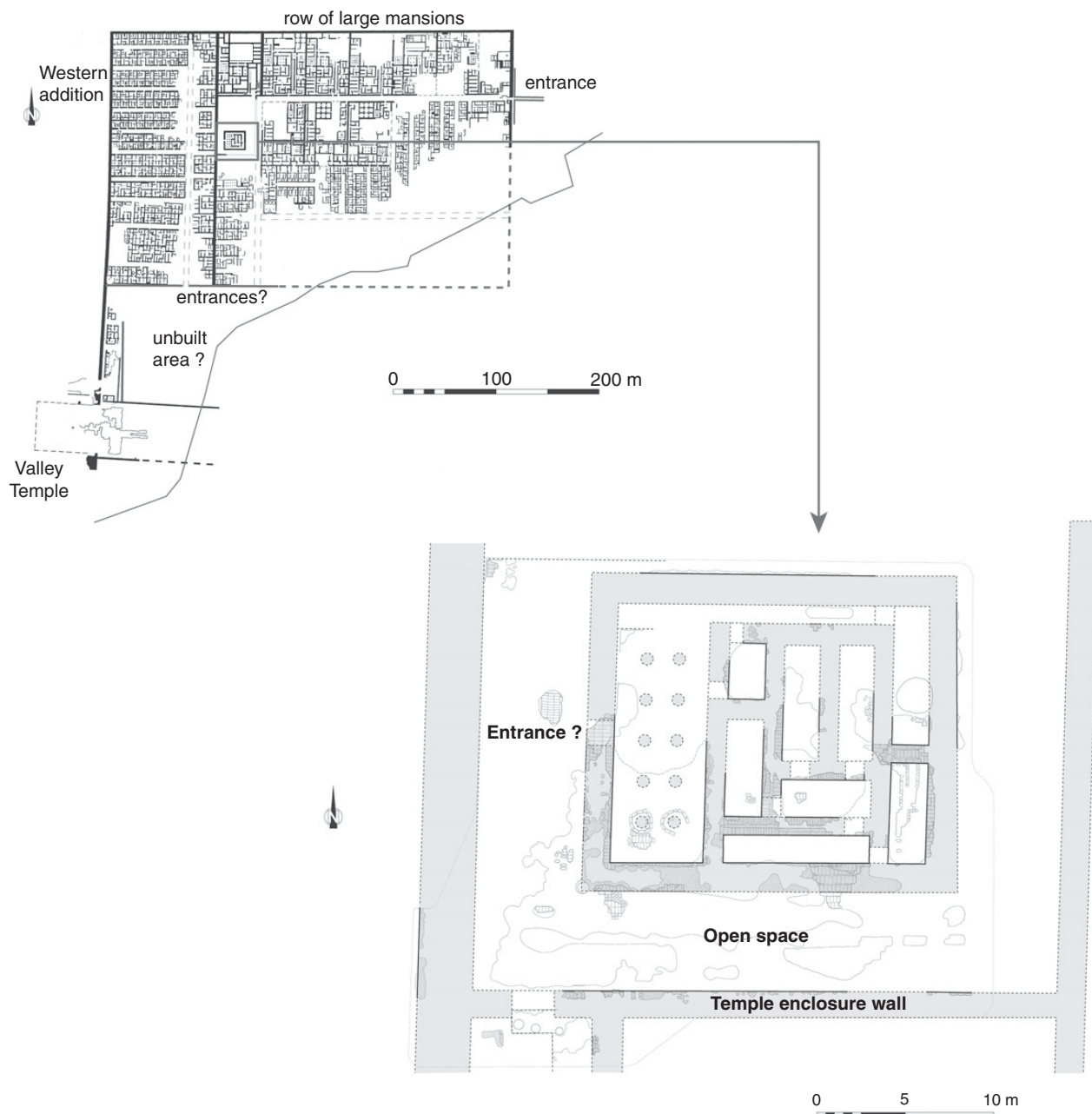
8.2.4.7 *The archaeological evidence for a temple in the main part of Lahun*

The building adjacent to the southern side of the acropolis has been problematic in its identification, partly due to its relatively bad state of preservation. Petrie found an open courtyard with traces of mud-brick pavement and a structure in the southern half of this open space; the latter was only partially preserved. He interpreted the structure as a guardhouse for the security guards of the king while he was staying at the acropolis building.¹³³ This interpretation of course does not hold any more, especially in view of the additional data obtained by the reinvestigation by the Canadian mission. The open courtyard-like area revealed traces of a brick floor, and the archaeological recording of the walls in the southern half were somewhat further completed by Millet and his team, adding to what is shown on Petrie's plan.¹³⁴ The reconstruction of the mud-brick building occupying the southern half of the courtyard area indicates an entrance on its western side through which a hypostyle hall with a double row of six columns each was entered (Figure 8.25). From there, a set of rooms was accessible in the interior – two elongated rooms lying parallel to each other marking the center of this structure.¹³⁵ The interpretations of the function of this building have ranged from a guardhouse, as suggested by Petrie, to an administrative edifice or temple.¹³⁶

No finds were recovered that could shed more light on its use, and the architectural remains are also sketchy at best for any attempt to clarify the function. Several points can be made that do not necessarily fully solve this problem but might contribute to the narrowing down of possibilities.¹³⁷ The hypostyle hall at the entrance of the structure is conspicuous and clearly marks it as an official building. A hall with a double row of columns can be found in temple architecture but also in administrative building complexes.¹³⁸ If the nonaxial approach into the interior of the building – which is characterized by passing through some interconnecting rooms of elongated shape – is correct, it will be difficult to identify it as a sanctuary, because most temples of the Middle Kingdom have an axial layout. The first place to look for parallels is without doubt the Nubian fortresses; they were state-planned constructions of the same period. At Buhen

there is a small mud-brick structure that has been identified as a temple, and it shows an axial layout. The inner sanctuary consists of three chapels – the central one the largest and therefore the main cult place. The chapels are fronted by three broad halls, one of which has a double row of six columns (Figure 8.34).¹³⁹ The plan of the fortress of Uronarti shows a building that has been very tentatively identified as temple too (Figure 8.36; see A).¹⁴⁰ In the original description of the architectural remains, the excavator does not confirm its identification as a sanctuary because it is equally likely that it was an administrative building.¹⁴¹ The reconstructed temple of Mentuhotep II of the Eleventh Dynasty at Elephantine has a nonaxial layout with a peristyle court and a small chapel to its side.¹⁴²

Apart from the obscure nature of the mud-brick walls, which makes any reconstruction difficult, the other unusual feature of the structure at Lahun is the open space around the building and the mud-brick wall surrounding it like an enclosure (Figure 8.25). All of the other buildings at this settlement are tightly built against one another, sharing common walls and, when possible, leaning against the town enclosure walls (see Figure 8.20). This is the case for the large mansions as well as the small houses. For constructions of the Middle Kingdom, only buildings that stand alone without any structures built against their exterior walls – and in most cases also have their own enclosure walls – belong to the category of temples and sanctuaries.¹⁴³ These observations strongly point to the presence of a temple complex that once would have stood in this central part of the town. There is also a possibility that the preserved structure was not the actual sanctuary but a related building with magazines and administrative areas that would have been closely linked to the temple that once stood farther north. This is of course difficult to verify because none of the excavators report any traces of foundation trenches or indeed any architectural remains in this area.¹⁴⁴ Nevertheless, the lack of such vestiges could be related to the destruction of the site in antiquity in order to recover stone elements. Any traces of the former mud-brick walls could have been subsequently lost to erosion, similar to what happened at the nearby Valley temple of Lahun. The problem in finding parallels for this structure at Lahun is seriously hindered by the fact that there are few settlements from the Middle Kingdom for which there is a good archaeological record of their sanctuaries and outbuildings. Nevertheless, in conclusion of this analysis, it is possible to propose that this settlement area south of the acropolis almost certainly once contained a temple complex.



8.25. Wall remains of the temple building at Lahun. By G. Marouard, after R. A. Frey and J. E. Knudstad, "The Re-Examination of Selected Architectural Remains at El-Lahun," *JSSEA* 35 (2008), 62, fig. 40. Copy of original plan courtesy of Z. Horváth.

8.2.4.8 Evidence for temples at Lahun in the textual record

The papyri found at the site mention several additional sanctuaries of the Valley temple. There seems to have been a cult dedicated to the gods Anubis and Sobek; both are mentioned in close connection with the cult for the deceased ruler Senwosret II in the part of the settlement called Sekhem-Senwosret.¹⁴⁵ It has been hypothesized

that these two shrines were either part of the Valley temple building or stood somewhere in its vicinity. As for a separate shrine or temple within the main part of the settlement, called Hetep-Senwosret, the evidence is less clear. While several papyri mention "Sopdu, Lord of the East" in the formulae at the beginning of the documents, no concrete reference to a temple of Sopdu can be found,

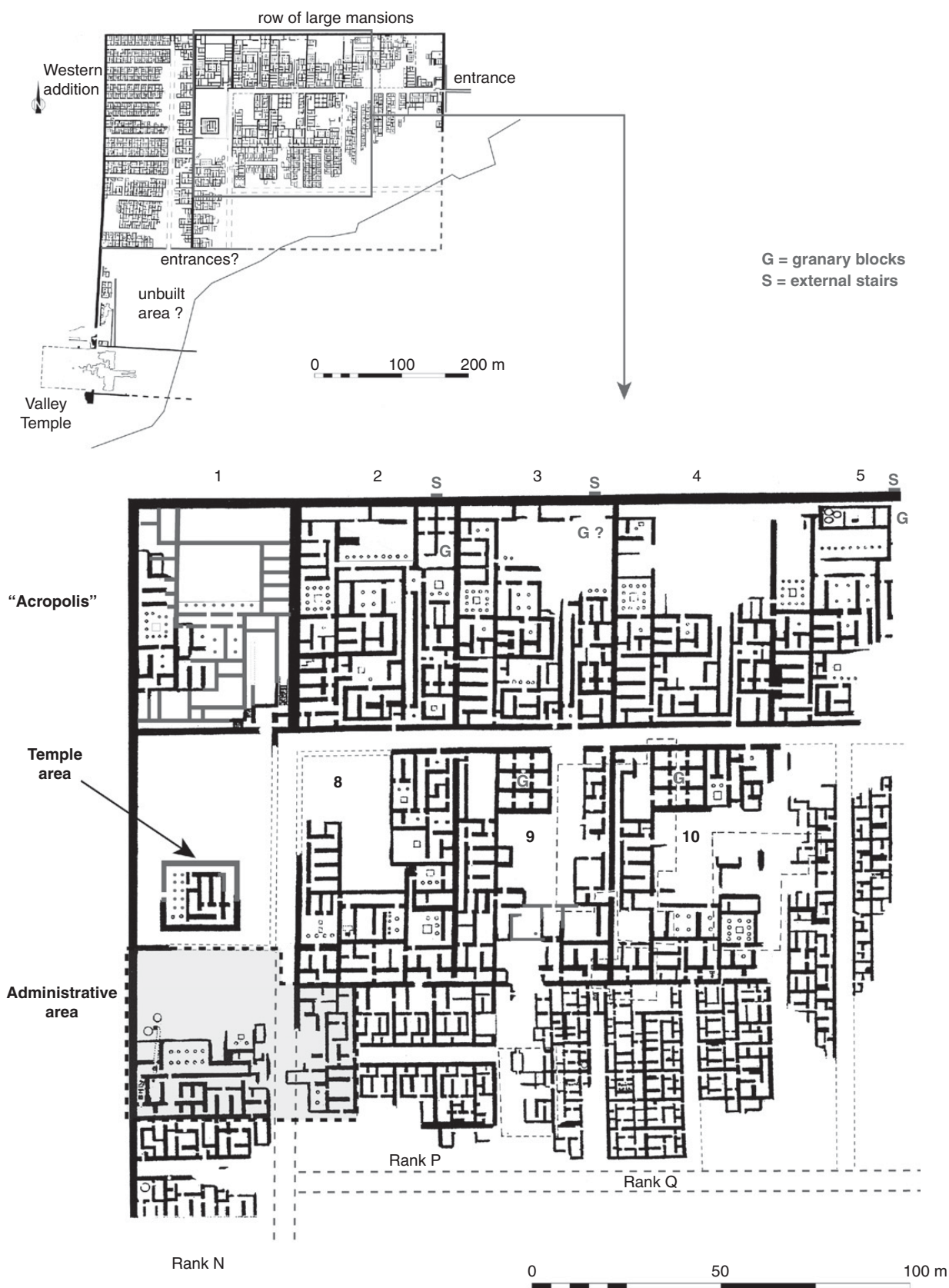
even though the frequency with which this god appears is noteworthy.¹⁴⁶ The only evidence that refers to a temple located at Hetep-Senwosret comes from a clay sealing that mentions the “scribe of the temple of Hetep-Senwosret.”¹⁴⁷ Therefore the evidence for the presence of a temple of Sopdu is not quite as conclusive as one would like and leads to two main opinions in scholarship. There are those who believe that there was a separate temple dedicated to Sopdu in the main part of the town, south of the acropolis,¹⁴⁸ and others who have suggested that a sanctuary for Sopdu existed in the nearby (?) settlement called Gesiab from at least the reign of Senwosret I onward.¹⁴⁹ In both cases, the current evidence is not entirely conclusive, but in addition to the archaeological data, a temple of Sopdu as part of the town of Hetep-Senwosret remains a very likely possibility.¹⁵⁰

8.2.4.9 *Administrative quarter in the center of the town*

Immediately to the south of the discussed building complex, a possible doorway through the mud-brick enclosure on the southern side led to further buildings that do not seem to fit in with the usually encountered layouts of private dwellings at Lahun but might have been used for administrative activities (Figure 8.26). From the doorway in the south that forms a kind of bent-axis approach, another columned hall consisting of a double row with five columns each was reached, similar to the one of the possible temple complex to the north (see Figure 8.26). Through this columned hall, a series of rooms could be accessed that are reminiscent of magazine-like installations and quite different from the small and midsize private houses. On the opposite side of the main north-south street and south of the westernmost mansion (8) of the southern row, more rooms can be seen that resemble those across the street (Figure 8.26). Could these buildings be part of an administrative quarter at Lahun? During the third fieldwork season of 1920, Petrie worked to the south of this area, excavating a house courtyard that had been divided, with one part containing several round grain silos and the other part appearing to have had some sort of offering table fronted by three columns.¹⁵¹ This courtyard, which also gave access to a cellar, was situated in the southern half of the site and east of the main north-south street. Petrie mentions in his report from 1920 that to the north of this building he found a large number of clay sealings.¹⁵² The sealings contain numerous fragments that had been impressed by official stamp seals, but there was also a large quantity of private

name sealings and further examples showing decorative motifs typical for the late Middle Kingdom.¹⁵³ It is quite likely that those sealings came from this area south of the possible temple precinct, which shows evidence for buildings of administrative character as outlined earlier. Those sealings would be a further piece of evidence for this part of the town having functioned as the administrative quarter. Petrie interpreted this context as possibly having served as “an office for the parcels and provisions sent for the governor of the town” and relates it to the officials who were in the service of the mayor of Lahun.¹⁵⁴

While a complex administrative system has been revealed through the textual sources, it has been difficult to assign any of the buildings to the various offices mentioned in the papyri and sealings. Petrie has published a selection of these clay sealings but reported only vaguely about the “find spots,” which makes it hard to associate any specific buildings with these objects. Excavations at the nearly contemporary site of Wah-Sut at South Abydos have recovered a large number of clay sealings in the house of the mayor and nearby waste deposits; for example, a large heap of discarded sealings was found near the southern gate of this building complex.¹⁵⁵ Substantial quantities of sealings were also found at the mortuary temple of Senwosret III. The situation at Lahun is more difficult because Petrie reported in his second report that another large corpus of sealings was found in two or three rooms, without giving any further details about the exact location.¹⁵⁶ By comparing find spots of sealings from other contemporary sites such as the Nubian fortresses¹⁵⁷ and the towns of Wah-Sut at South Abydos¹⁵⁸ and Edfu,¹⁵⁹ it is evident that large amounts of sealings usually occur in dumps of waste along the exterior of administrative structures but also within abandoned rooms of such buildings that were used for trash disposal. Sometimes sealings can be found in accumulations of trash directly on the floor levels within the administrative buildings. In these cases, they had been discarded without being cleaned up, which usually occurred prior to the final abandonment of the structure.¹⁶⁰ The rather vague descriptions concerning the sealing finds at Lahun by Petrie are problematic, and therefore it remains difficult to discern what role the large mansions played within the overall town administration. While it is possible, despite little concrete evidence, to tentatively identify an administrative quarter in Lahun south of the acropolis where probably “offices,” storage installations, and a temple complex once stood, the role of the large mansions



8.26. Plan of the center of the town of Lahun showing the temple, the "acropolis," and the elite residences. By G. Marouard, after C. Gallorini, "A Reconstruction of Petrie's Excavation at the Middle Kingdom Settlement of Kahun," in S. Quirke (ed.), *Lahun Studies*, Reigate 1998, 47, fig. 2.

within the whole system of town administration remains obscure.

Due to the lacking stratigraphic data and find spots of objects within Lahun, it has been difficult to ascertain whether the owners would also have conducted official business inside these large homes. Again, a comparison with Wah-Sut proves useful. The mayor's house at this site was clearly identified due to the large amount of clay sealings found there – good proof for administrative and official business having taken place in this building complex. As for the division of residential and administrative room structures, it has been tricky to identify any one of the rooms or groups of rooms as having served solely for an administrative purpose; much evidence points to a multifunctional use of the interior rooms, similar to what has already been found to be the case at Old Kingdom houses. The governors' or mayors' residences seem to have always included official administrative activities in addition to residential use. This can also be seen at the two First Intermediate Period governors' "palaces" at Elephantine and Balat.¹⁶¹ Even though it is easy to imagine the highest officials known from the textual records to have occupied these mansions, no specific office or owner has been identified for any of the Lahun mansions so far. The acropolis is the only mansion for which it is possible to assign the mayor as the most likely occupant – due to its prominent position within the town. No sigillographic evidence has been found here that could corroborate this interpretation, but this area, being most exposed to the elements, was also badly eroded.

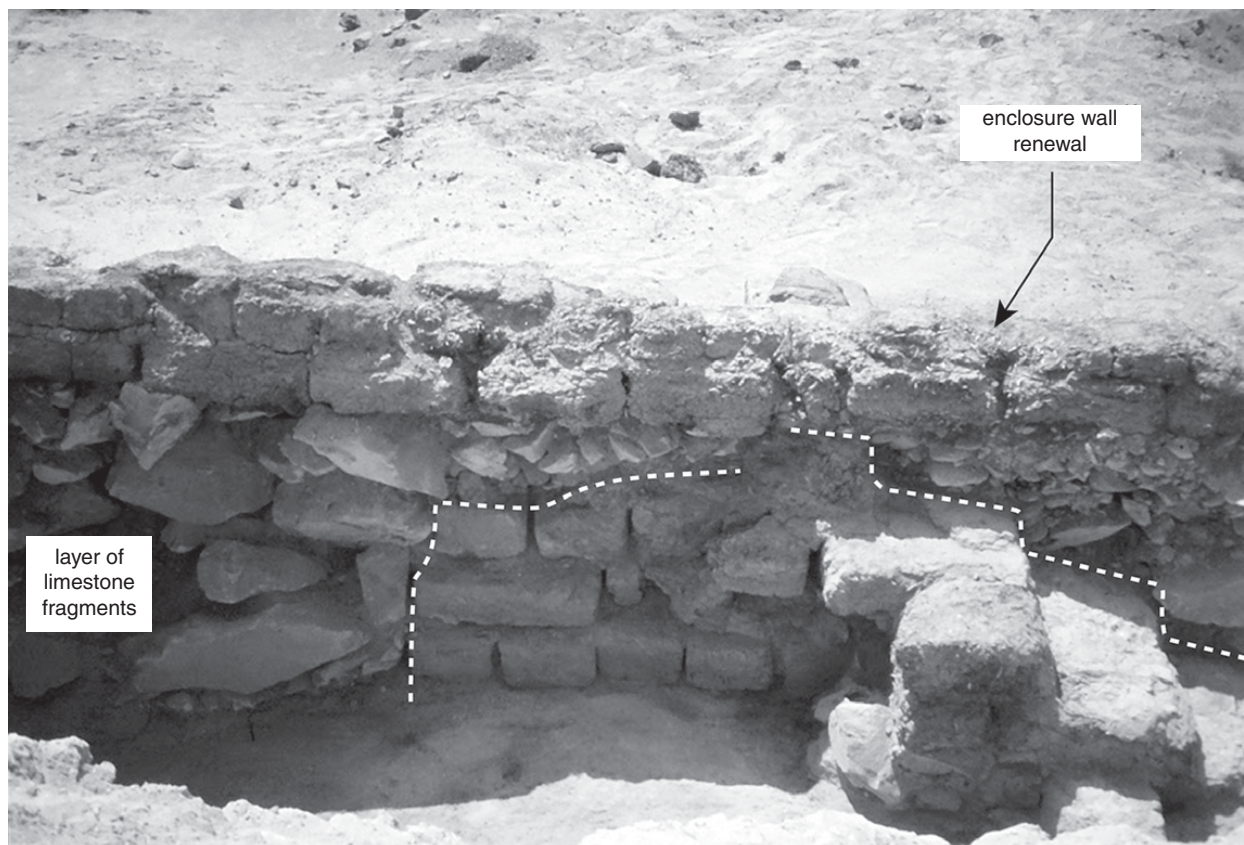
This confirms that the architectural layout per se clearly provides only little evidence for administrative activities, as in most cases houses of seemingly residential nature could also have been used for official and administrative tasks. In ancient Egypt, in contrast to the later Greek and Roman civilizations, there is no particular architectural form that is solely used for administrative purposes. This phenomenon has recently been addressed by Nicolas Picardo, who, based on the evidence from the larger houses at Wah-Sut, employs the term "hybrid households," referring to the fact that residential buildings functioned for private and official activities.¹⁶²

8.2.4.10 Residential quarters of the town

The mud-brick buildings with residential character at Lahun can be grouped into different categories of houses according to their size. Stephen Quirke, in his study of

the town, divided them into "palaces" or mansions, which constitute the largest buildings, covering about 2,700 m²; midsize houses with a surface ranging from 100 m² to 168 m², and small houses of 50 m² or less.¹⁶³ The dominant size of the mansions forms quite a strong contrast to the other dwellings. While they were all built on a similar plan, with a recurring layout of living units and only small variations from one mansion to another, it is evident that they had more than a residential function.¹⁶⁴ For example, all of them had been equipped with a granary block that can be recognized on the plan as groups of eight or nine square chambers of identical size that were interconnected (Figure 8.26). Along the northern exterior face of the enclosure wall, remains of three external staircases were found during the recent excavations by the Canadian mission (Figure 8.27). These were in each case aligned with the granary complex of one of the mansions (Figure 8.26).¹⁶⁵ The excavators noted that those stairs were later additions and evidently had the purpose of facilitating access to the granaries for deliveries.¹⁶⁶ This is further corroborated by the fact that the granary blocks of the southern row of mansions (nos. 8–10) each had their granary storage facility on the northern side of the building, adjacent to the main street, which would have also provided convenient access for any grain delivery, especially because there is no access from the southern side, where the rows of smaller houses are directly built against the exterior walls of the mansions (Figure 8.26).

Kemp suggested that the mansions at Lahun had been occupied by members of the elite, including their large households, and probably belonged to the highest-ranking officials on site.¹⁶⁷ The total capacity of the granaries taken together could have supported the entire population at Lahun on a redistributive system based on rations. Additional circular grain silos attached to the smaller houses only occur sporadically in Petrie's plan, and it is not clear how many of those were secondary additions. The relative lack of storage facilities in the smaller houses seems to confirm the economic role of the residents of the larger mansions in relation to the majority of inhabitants. However, it is also important to take into consideration the observation that the people living at Lahun most likely had additional means of acquiring food – for example, by keeping animals nearby and/or being involved in agricultural activities. No faunal analysis has ever been made, but Petrie collected large amounts of plant remains from the site, which were analyzed by Percy E. Newberry.¹⁶⁸



8.27. Remains of external stairs on the northern side of the enclosure wall at Lahun. By G. Marouard, after R. A. Frey and J. E. Knudstad, “The Re-Examination of Selected Architectural Remains at El-Lahun,” *JSSEA* 35 (2008), 44, fig. 23. Copy of original photo courtesy of Z. Horváth.

Evidence for agricultural activities at Lahun was found during Petrie’s excavation, in the form of a large number of tools – flint sickles, wooden hoes, and the like – used for harvesting and threshing.¹⁶⁹ Additional information about the inhabitants being engaged in agricultural activities can be found in the papyri. There is information about fields being plowed that belonged to the district of Hetep-Senwosret¹⁷⁰ and the presence of vegetable producers.¹⁷¹ One of the papyri mentions a supply of fish, which was another important addition to the people’s diet.¹⁷² Weaving was also part of the activities, and a papyrus mentions the growing of flax.¹⁷³ Furthermore, the economic basis of this town depended to some extent on endowments that were made by the king in the form of allocated land. These would yield the necessary cereals and produce for the upkeep of the mortuary cult and support the people who lived in this settlement. The papyri also frequently mention the various labor obligations people had been assigned to,

and it is likely that the people referred to were also inhabitants of the town. It seems that during the Middle Kingdom, the pyramid towns became very elaborate on an administrative level and saw an increase in size and complexity in comparison with conditions in the Old Kingdom. These state foundations appear to have been administered along the same lines as other major towns in the Nile Valley, based on the surviving textual records.

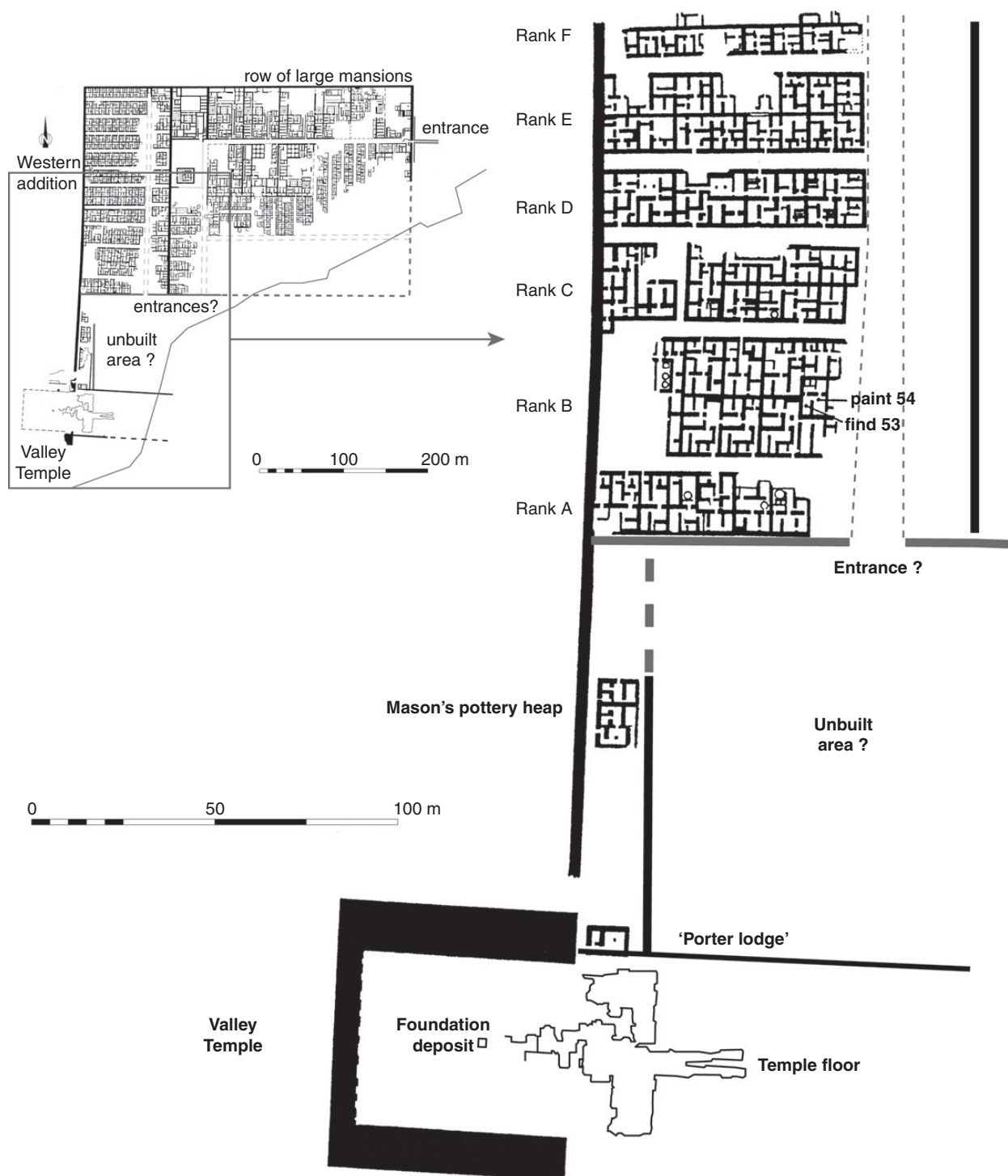
The general layout of the town demonstrates that the mansions were constructed in two rows, with seven along the northern side and three to the south (Figure 8.20). East and south of the southern mansions, several rows of midsize and small houses are indicated on Petrie’s plan; these form a stark contrast to the much-larger mansions. It is possible that the inhabitants of the small houses were intimately connected to the owners of the big mansions and their families, and may even have been part of their households.

The western part of the settlement, separated by the older north–south enclosure, is marked by at least twelve preserved rows of small mud-brick houses of almost-identical layout, organized in the same rectangular grid pattern that can be seen in the eastern part of the town and separated by small streets (see [Figures 8.22](#) and [8.28](#)). As outlined earlier, this part of the settlement had housed the community that was directly linked to the upkeep of the royal mortuary complex. The individual rows of houses are in fact double rows, with houses built back to back, a phenomenon comparable to what has been found at the Middle Kingdom settlement at Ezbet Rushdi in the eastern Delta.¹⁷⁴ The main difference to the Ezbet Rushdi settlement is that in Lahun there has been no evidence for any functional courtyards or storage areas assigned to these houses, and the Lahun dwellings show much more variation in their internal layout, although different building phases may have been included on the same plan and might distort the picture to some extent. The northwestern part of this settlement area, which shows the smallest houses, especially in the northernmost rank, saw a phase of reoccupation during the New Kingdom.¹⁷⁵ Petrie also notes the presence of granaries at these houses of the western sector, which are likely to be secondary additions.¹⁷⁶ In the northeastern corner is a larger building that differs in its layout from the surrounding houses. It might have even had a small courtyard with a columned portico ([Figure 8.20](#)). Another, larger building might have stood on the eastern side of Rank C, which also contained two rooms with columns ([Figure 8.22](#)). While both houses fall into the midsize category and are still considerably smaller than the mansions of the main townsite, they stand out from the other dwellings because of the presence of columns. Still another larger building was found in close proximity to the mortuary temple, which can be recognized on the recent geophysical map of the temple area.¹⁷⁷ This might have been the seat of the highest temple administration, which is further confirmed by the large waste deposit on the exterior of this building next to the enclosure wall.¹⁷⁸ This is the dump that contained numerous papyri.

To what extent does the extreme difference in size between the big and the small houses reflect a similar divide on a social level? Kemp emphasizes in his study of Lahun that Middle Kingdom society was rigidly structured, the expression of social differences taken to an extreme without “much of a social gradient.”¹⁷⁹ Although this situation seems to be confirmed by the general layout and organization of Lahun, the “objects

of daily life,” the papyrus documents, and several elaborate wall paintings¹⁸⁰ Petrie discovered indicate less of an extreme social gradient. Of the relatively few objects for which Petrie recorded the exact provenance, many were found in the smaller houses, but they do not paint a picture of “poor” people. Some valuable objects such as copper tools and vessels also were found in the smaller houses. Similarly, the papyrus documents do not come from one of the mansions but from the rows of smaller houses, although not all of these documents have a secure provenance.¹⁸¹ Two lots of papyri might have come from the excavation of the southern ranks of smaller houses in the western section of the settlement.¹⁸² They refer to the same family and might have been a small archive kept in the actual residence of these people.¹⁸³ The find spot was within the western end of Petrie’s Rank C in the western part of Lahun, and the house size can be considered to belong to the midsize category ([Figure 8.28](#)). Based on the papyri, the owner was a *wab*-priest called Wah who would probably fall into the ranks of the “middle class” within ancient Egyptian society.¹⁸⁴ This find also confirms that the mud-brick houses were not necessarily exclusively residential in their use, but seem to have included administrative activities too, which is demonstrated by the content of these papyri dealing with daily matters of the mortuary temple.¹⁸⁵

The numerous sherds of imported pottery vessels from Minoan Crete and the eastern Mediterranean and Levant, such as Levantine Painted Ware and Cypriote pottery,¹⁸⁶ indicate that the settlement of Lahun was linked to the wider trade network within Egypt and possibly abroad.¹⁸⁷ Minoan sherds and Egyptian imitations of Minoan pottery that were found by Petrie during the first season of excavations were donated to the British Museum, where they were initially registered as Greek pottery. Due to the work by Kemp and Robert Merrillees many years later, this material was reevaluated.¹⁸⁸ The majority of those sherds come from the large waste dump situated along the exterior of the northwestern corner of the settlement, just behind the rows of small houses in the western sector ([Figure 8.20](#)).¹⁸⁹ This might indicate that imported wares from the eastern Mediterranean were not necessarily restricted to the highest elites but occurred in a variety of contexts. However, there is also a possibility that the waste dump was deliberately placed at some distance from the mansions to keep their rear walls open and clean. One of the Cypriote sherds was found in Mansion 9, the easternmost mansion of the southern row ([Figure 8.26](#)). Neutron activation analysis conducted on the twenty-two Minoan



8.28. Plan of the Valley temple area and the southwest corner of the town of Lahun. By G. Marouard, after C. Gallorini, "A Reconstruction of Petrie's Excavation at the Middle Kingdom Settlement of Kahun," in S. Quirke (ed.), *Lahun Studies*, Reigate 1998, 45, fig. 1.

sherds has shown that the majority can be traced to the palace complex at Phaistos. On stylistic grounds, these sherds seem to be contemporary to the reign of

Amenemhat III.¹⁹⁰ This opens up interesting questions about the relation between Phaistos and Lahun.¹⁹¹ The fact that imported pottery from different regions in the

eastern Mediterranean appeared in a variety of contexts at the site indicates the existence of a well-established trade network of which Lahun was part and would argue against a single delivery of items. The Minoan palatial complex at Phaistos is located along the southern side of Crete, has an important harbor, and seems a logical place for having had contacts with the Egyptians. It is situated closest to the Egyptian mainland, easily attainable via ship.¹⁹² The pottery sherds found at Lahun belong to nineteen different pottery vessels and together with sherds from Haraga form the biggest corpus of Minoan Kamares ware ever found in Egypt.¹⁹³ The fact that such objects have been discovered at Lahun also indicates the presence of high-status officials with close links to the royal court.

Thus, the material culture uncovered at Lahun reveals a relatively wealthy urban society being part of a complex mortuary foundation that they were administering and working for. While this was certainly one of the main functions of the town after the death of Senwosret II, there is much evidence that Lahun also functioned in a way comparable way to other urban settlements, which can be confirmed by the fact that it was set up and administered in the same fashion as urban sites in the floodplain. This is an interesting concept and demonstrates that a pyramid town could have been inhabited by a substantial population involved in administrative activities and services that consisted of a wide spectrum of different social levels as part of the same community.

One of the main differences between Lahun and the towns in the Nile Valley is Lahun's foundation *ex nihilo* by the state. It is typical for a state foundation to be restricted in some way by the central government as to any future settlement growth, prohibiting any private initiatives of expansion of dwellings and numbers of inhabitants.¹⁹⁴ Organically developing towns and cities, in contrast, frequently include extramural settlement and activities zones, which as the town grows gradually become incorporated into the enclosed town area. Such a dynamic can be witnessed, for example, at Elephantine and Tell Edfu, two large towns in Upper Egypt. A feature that is missing at Lahun is the evidence for larger production zones along the outer margins of the town related to the mortuary temple of the king, but this could be the result of the current state of preservation. Such a production zone, which occupied the area between the mortuary temple and the settlement has clearly been identified at the town of Wah-Sut in South Abydos (see following in [Section 8.2.5](#)).

Furthermore, the archaeological data shows that Lahun remained an important center within its region until the

end of the Middle Kingdom and was probably abandoned sometime during the late Thirteenth Dynasty. Many of the papyri date to the reign of Amenemhat III, a ruler of the second half of the Twelfth Dynasty and even refer to his building project at Hawara, which was obviously overseen by the staff from Lahun.¹⁹⁵ This demonstrates an involvement of the Lahun inhabitants in activities that exceeded the duties for the mortuary cult for Senwosret II. This observation also fits with the fact that only Sekhem-Senwosret, the western addition at Lahun, was assigned to the mortuary cult of this ruler (see [Section 8.2.4.4](#)). The remainder of the town would have had a much more diverse function within this region in proximity to the Hawara Channel at the entrance to the Fayum depression.

As can be learned from the various examples discussed so far in this chapter, the Middle Kingdom rulers not only founded elaborate preplanned settlements for royal mortuary cults but also seem to have pursued an active policy of managing agricultural land. They made some efforts to colonize marginal zones of the Nile Valley and Delta that might have been underutilized up until then. The measures invested in the Fayum region show their effective policy of making use of a region with much agricultural potential. Lahun seems to be an exceptional site in many ways, and its prosperity continued a long time after the death of Senwosret II – for about 150 to 200 years. With regard to the archaeological data – which provide some evidence for the existence of the main part of Lahun before the western town section had been added – it was probably not conceived as a “pyramid town” at the time of its foundation; its layout is marked by most of the common urban characteristics. The success of Lahun might be linked to its geographic location at the Fayum entrance, which saw considerable development from the early Twelfth Dynasty onward, including the move of the national capital and royal residence to Itj-Tawy, a site close to the modern village of el-Lisht. Itj-Tawy was founded by Amenemhat I, the first ruler of the Twelfth Dynasty, and was most likely located about 40 km to the north of Lahun.¹⁹⁶ The presence of several royal mortuary complexes in this region made the town of Lahun an important center along the Western Desert edge, which had been set up with a complex system of administration and a functioning infrastructure. Because of its size and orthogonal layout, Lahun has frequently been compared with Wah-Sut at South Abydos, an almost-contemporary town linked to the mortuary temple of Senwosret III. However, there are some distinct differences between

these two sites that emphasize the unusual status of Lahun even more clearly.

8.2.5 The settlement of Wah-Sut at South Abydos

At the Upper Egyptian site of Abydos, the excavations of the University of Pennsylvania Museum for Archaeology and Anthropology, directed by Josef Wegner, have discovered not only the mortuary temple and associated tomb complex for Senwosret III but also a large settlement that has a striking similarity to Lahun. Excavations have revealed several elite residences along the desert edge in the southern part of Abydos that had been laid out according to an orthogonal grid system resembling the layout of Lahun (see Figure 8.29). Although frequently compared with each other, the close analogy between Lahun and Wah-Sut needs to be carefully evaluated. There are some indications that whereas both are Middle Kingdom foundations associated with the mortuary cults of two rulers of the Twelfth Dynasty – Senwosret II and Senwosret III – there are important differences. Wah-Sut's primary function was to maintain the mortuary temple and cult service, while, as outlined earlier, this might not have been the sole purpose of Lahun.

8.2.5.1 The general layout of Wah-Sut

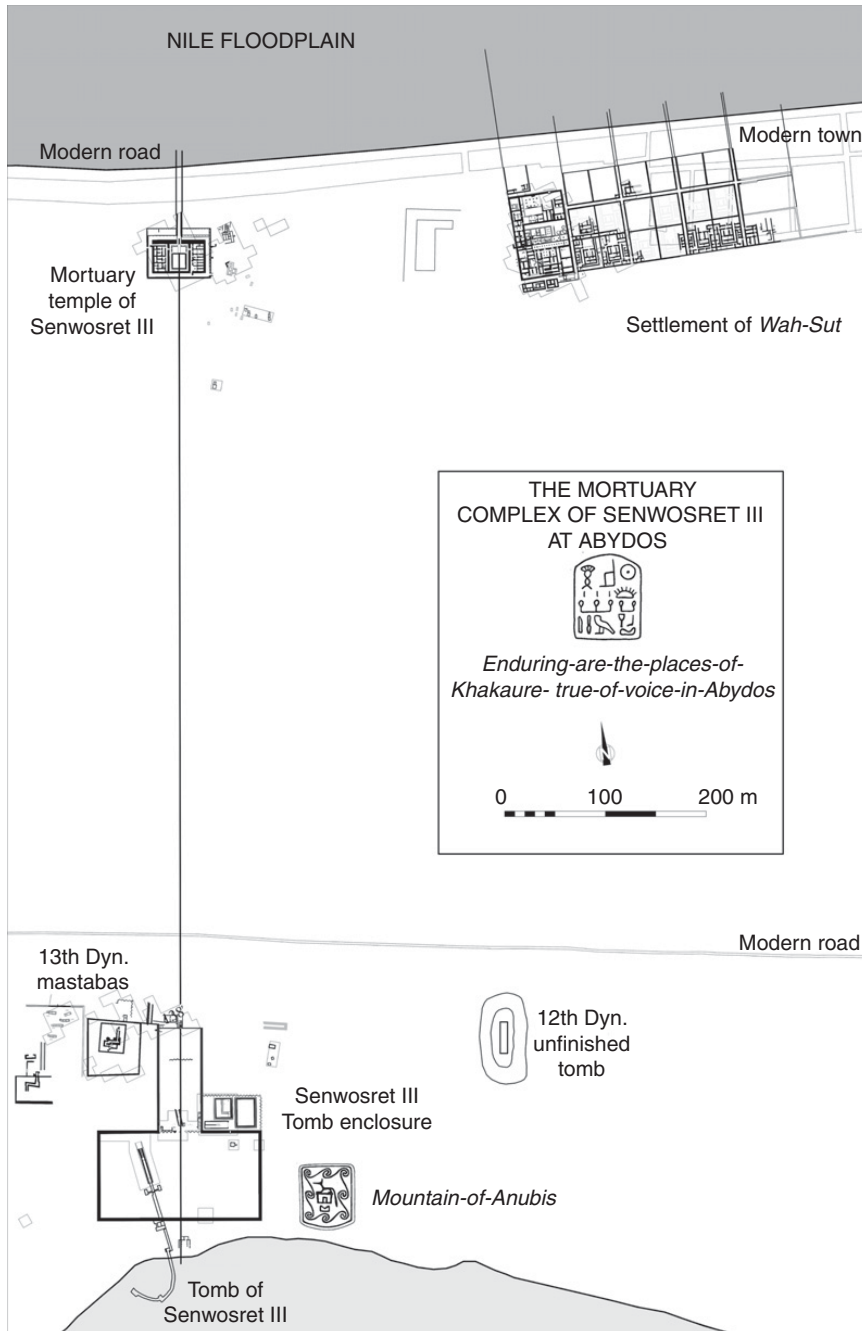
The settlement of Wah-Sut is situated on sloping terrain along the low desert margin and lies about 300 m south-east of the mortuary temple of Senwosret III (see Figure 8.29). Excavations of the settlement have focused on a number of elite residences that are laid out in a north–south direction, forming distinct blocks of buildings as part of a general orthogonal organization. The southwestern corner of the town is marked by a very large building, A, that occupies an entire block and has been identified as the mayor's residence according to clay sealings found there (Figure 8.30).¹⁹⁷ A north–south street separates it from the adjacent block of buildings (Buildings B–F; see Figure 8.30), which is made up of four medium-size elite houses. Apart from Building A, approximately four such blocks containing four medium-size residences each have been reconstructed to the east, based on the archaeological remains. The eastern limit of the town has not been identified so far. The northern part of the settlement site lies partially under the modern village of South Arabeh and the adjacent cultivation, which makes any further expansion of the excavation in

this direction difficult.¹⁹⁸ In the past, reconstructions of the dimensions of Wah-Sut have been heavily based on the layout of Lahun, assuming an almost-square layout in which 75 percent of the site would currently lie under modern settlement and fields (Figure 8.32). It has further been suggested that these now-inaccessible parts of Wah-Sut would have contained the smaller houses. However, with regard to the amended reconstruction of Lahun as outlined here, it is quite likely that less of Wah-Sut extended to the north than previously assumed, and possibly only 50 percent or less is currently “missing.” So far, not a single small house has been found, and it is likely that those houses were located in the now-missing portions of the settlement. Similar to Lahun, the elite residences lie toward the rear of the site, on the slightly more elevated bedrock formation of the low desert, while the smaller houses would have been closer to the floodplain.¹⁹⁹

8.2.5.2 Building A – the mayor's residence

The ongoing excavations at the site have focused on a building complex that can be considered the largest structure within the settlement discovered so far – identified as the mayor's residence. From the multitude of discarded clay sealings, the sequence of different mayors who lived here has been reconstructed.²⁰⁰ And as a result of the recent fieldwork, it has been possible to trace not only the complete layout of Building A (Figure 8.31) but more importantly its evolution over time. This is one of the aspects we are sorely missing from Lahun, even though there are many indications that the large mansions there saw substantial alterations over time too. Building A measures 53 m by 82 m and covers an area of about 4346 m², which is much larger than the other, medium-sized residences to its eastern side. Within the settlement, it occupies a strategic position in the southwest corner of the town that provided the closest access to the mortuary temple, situated about 300 m to the west. Therefore, it clearly stands out by its size and proximity to the mortuary complex, but there is no corresponding hierarchy in the street network that connected the main axis of the town to the mayor's residence as in Lahun – at least as far as the layout of the whole settlement can be reconstructed at this point. The streets of Wah-Sut that are marked on the site plan and are separating the various housing blocks seem to be of uniform size.²⁰¹

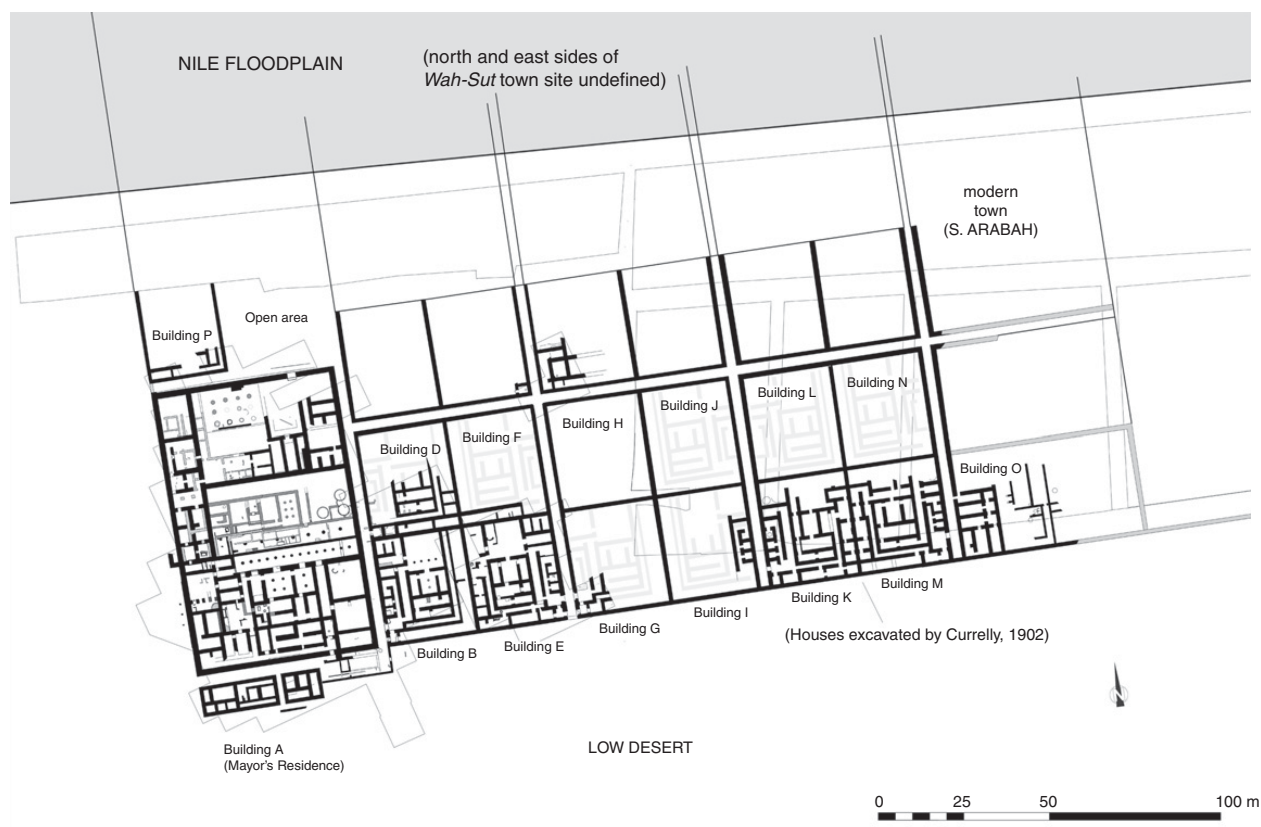
Building A had two principal entrances: one to the rear that is located on the southeastern side of the building and



8.29. Mortuary complex of Senwosret III and associated town of Wah-Sut at Abydos. © J. Wegner (2013).

another to the north that gave access into the large courtyard (Figure 8.31). The latter functioned as the formal entrance from the northern street, providing access into the courtyard and facing the colonnaded hall that led into the core residence of the mayor. Traces of a mud-brick ramp that would have led to the main entrance of Building A were discovered here.²⁰²

The rear gate was hidden by a small L-shaped screen wall that had been constructed in front of it. Behind the screen wall, a substantial mound of discarded sealings has been found, many of which mention the *areryt* (ꜥrꜣt), or gatehouse (Figure 8.31).²⁰³ This entrance was linked to the rear part of the building, which had an administration function. A long corridor led to the west, from which

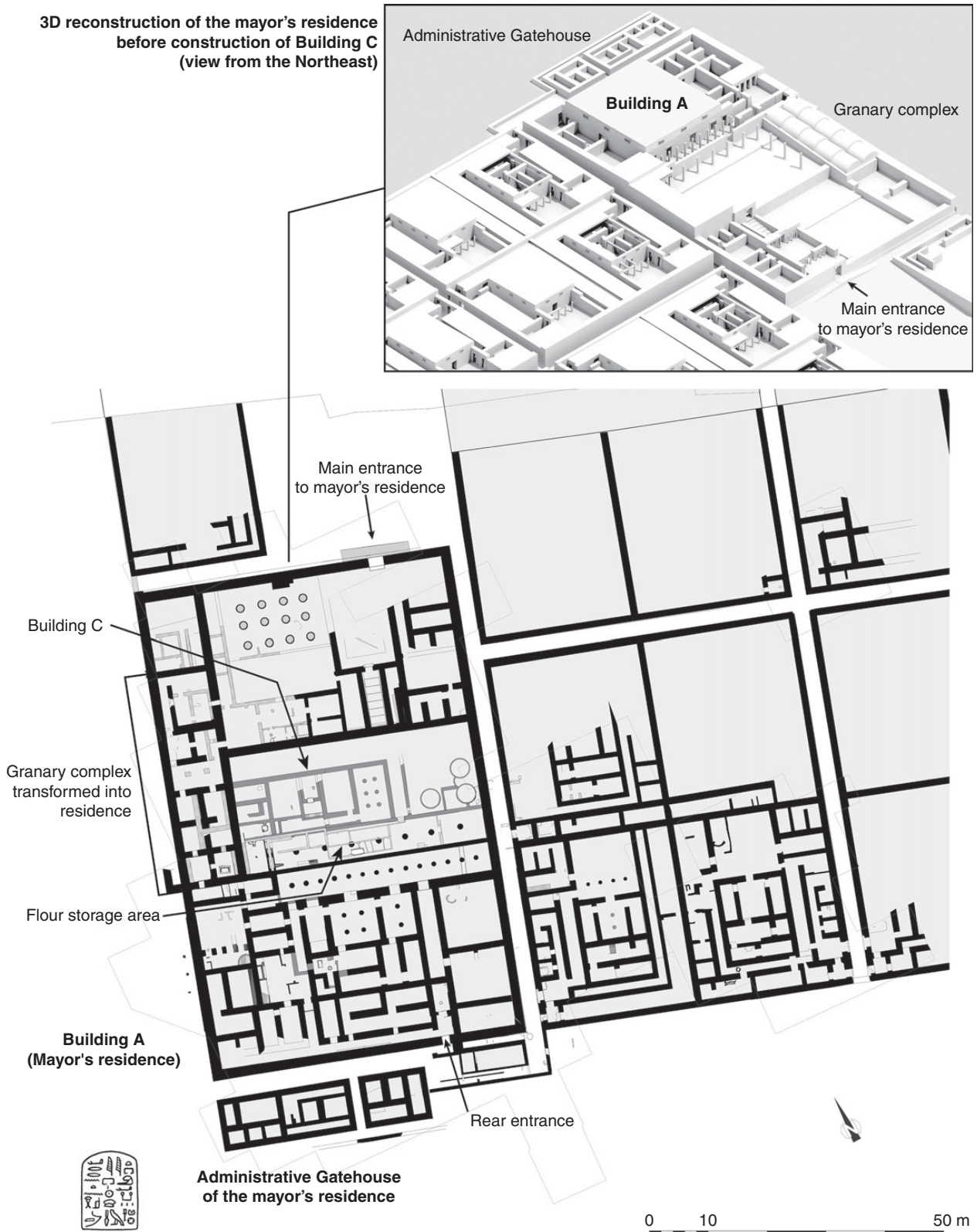


8.30. Plan of the settlement of Wah-Sut at Abydos. © J. Wegner (2013).

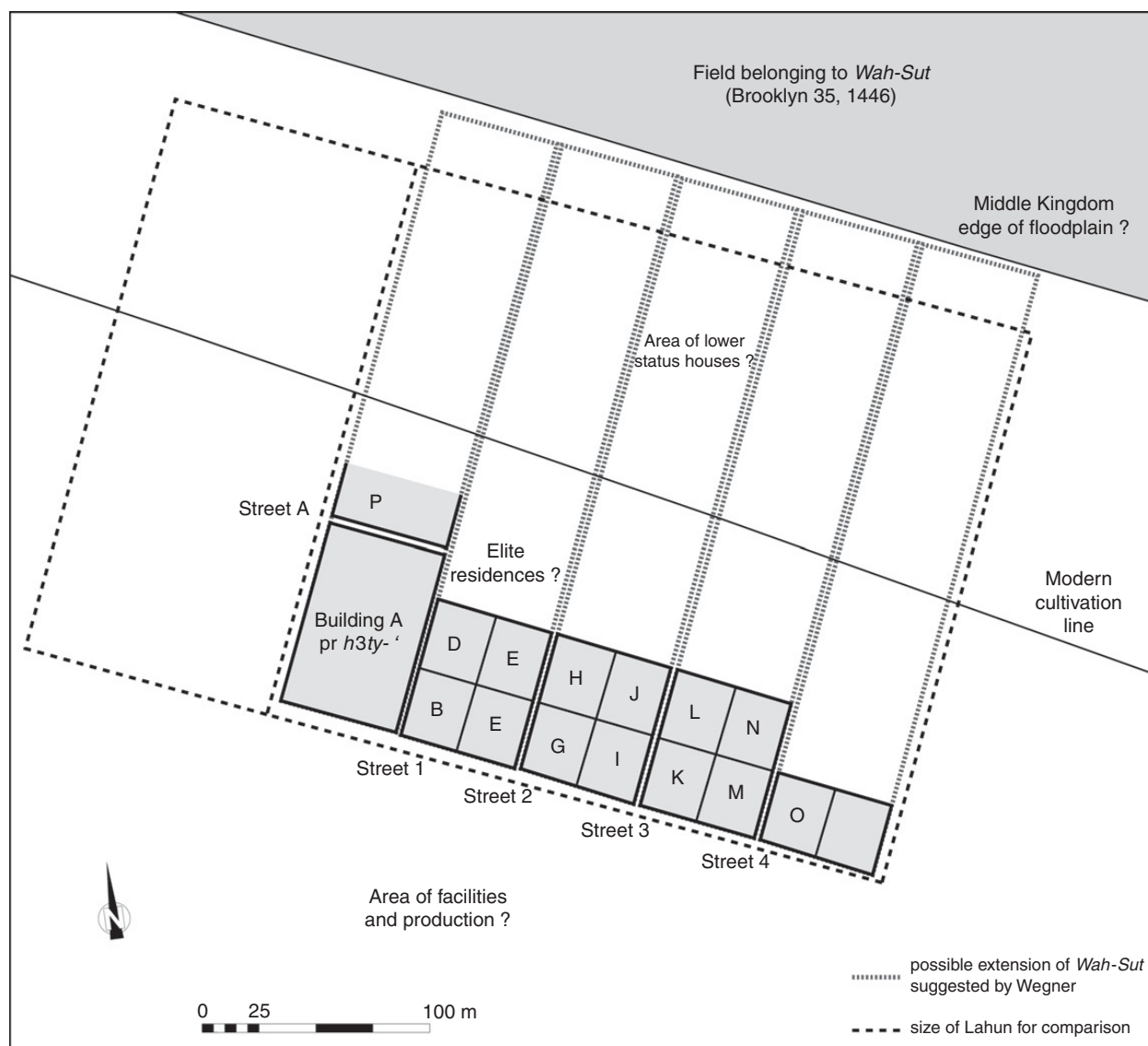
several rooms and room groups serving administrative purposes were accessible.²⁰⁴ Furthest to the west, three open courtyards were discovered that have been identified as the service area for the mayoral residence; these showed evidence for short-term food storage and preparation (Figure 8.31). A considerable concentration of broken sherds that stem from large Marl C storage jars,²⁰⁵ as well as many organic and faunal remains, was found in the courtyard adjacent to the residential core unit. In addition, several bin installations were noticed here. On the opposite side of the entrance, another set of large open courtyards can be seen; these, like the western service area, are separated from the central part of the residence by a corridor. The precise function of these two courtyards is so far unknown because of heavy erosion in this area.²⁰⁶ Between the service areas lay the core residence, consisting of nine rooms (see Figures 8.31 and 9.24). They were accessible through a twenty-four-column portico on the southern side, and three doorways opened into three larger rooms, which have been interpreted as reception or living rooms. The most prominent one, in the middle, had four columns, while the one to its east side was equipped

with two. On the western side, a room with a bed niche at the rear was found.²⁰⁷ Behind these larger rooms the more private rooms of the core unit have been identified.²⁰⁸ Several of them had been equipped with small hearths in the floor that could have served as a source of heat.²⁰⁹ The core unit of Building A has close parallels to the main living units within the large mansions at Lahun, which were also accessible through a columned portico.²¹⁰ Interestingly, the proportions of the inner core units of the two areas are also very similar, despite the considerable difference in size between Building A and the large mansions at Lahun (Figure 9.23).²¹¹

To the north of the columned portico was a large open courtyard, which is the central feature of Building A. It saw several alterations over time, with additions of a new building, C, and several round grain silos (Figure 8.31).²¹² The portico was changed at some point, the columns dismantled and removed, and the whole space transformed into a flour storage area and administrative unit.²¹³ These changes seem to have occurred during the Thirteenth Dynasty, but one can only speculate about the factors prompting them, which were probably



8.31. Plan of Building A at Wah-Sut showing different building phases. © J. Wegner (2013).



8.32. Schematic reconstruction of the settlement of Wah-Sut showing possible size of the town (currently known buildings are marked in gray). By G. Marouard, after J. Wegner, "The Town of Wah-Sut at South Abydos: 1999 Excavations," *MDAIK* 57 (2001), 288, fig. 4.

of an economic nature. It seems that the available space within Building A was put to the best use for the economic and administrative services carried out there. In that respect, it is noteworthy that a granary block of ten units that had originally been part of the western side of the large courtyard was completely remodeled sometime during the Thirteenth Dynasty in order to create living quarters for a princess named Reniseneb, who probably married one of the local mayors at Wah-Sut (Figure 8.31). The granary unit was changed into a seven-room residential unit with service and storage areas attached to its

northern and southern sides. It also gave access to the central courtyard, which saw the addition of a small formal garden with numerous tree pits organized in three rows of four at the southern end; roots of fig trees were found in the pits.²¹⁴ Evidence of a new function for this unit is based on a concentration of numerous clay sealings inscribed with the princess's name, found in floor deposits of the remodeled granary complex.²¹⁵ This not only demonstrates the adaptability of the local architects but also the high status and close link of the mayor of Wah-Sut to the royal court and family.

8.2.5.3 *The gatehouse at the rear and further installations along the exterior of Building A*

On the exterior of Building A, several installations were discovered that can be further linked to the economic function of this residence. Two platform installations with a kind of thin-walled bin on top of each were found just outside the southern gate area.²¹⁶ A similar but slightly smaller platform was added later just southwest of the screen wall at the entrance. The function of these installations is not clear but seems to have been related to grain storage.²¹⁷ While these were certainly not meant for long-term storage, they could have been used in relation to drying grain in the open before bringing it inside Building A and filling the granaries. As mentioned earlier, the large deposit of discarded clay sealings repeatedly mentions the Gatehouse (*ꜥrryt*). According to textual sources, this was the name for an economic institution linked to the reception of goods being delivered to temples, palaces, and other kinds of official buildings such as this mayoral residence.²¹⁸ A geomagnetic survey conducted in 2002 revealed further structures and rooms along the exterior of the southern wall, indicating a much more complex setup of which the platforms were only a part.²¹⁹ Excavations in 2004 then unearthed two larger structures with several rooms that were in fact the actual Gatehouse buildings.²²⁰ These remains comprise additional installations of administrative and economic function associated with Building A and might have been related to the storage, processing and accounting of commodities.

Two more features along the western exterior of Building A are worth commenting on. A small mud-brick chamber with a large number of sherds from Nile C water jars was found next to the granary complex and close to the western service area (see Figure 8.31). Its walls were unusually thick, and its floor was cut deeply into the ground, which would have provided a cooling atmosphere for the storage of water jars that supplied the inhabitants of Building A.²²¹ Also noteworthy is a thick deposit of *Ziziphus spina christi* (Christ's Thorn) seeds, which the excavators remarked upon, that had accumulated along the western exterior of Building A. The presence of extremely high quantities of seeds from this tree were traced along the entire western exterior up to the southwestern corner of Building A, where the amount seems to decrease.²²² This is good evidence for the presence of numerous trees that would have stood in an area that nowadays is characterized by the flat desert surface.

The whole site would have been much greener than it is today, and the presence of trees and gardens as part of domestic buildings, especially elite residences, is well known from tomb models and paintings.²²³ These trees would not only have provided shade but also fruits, which were edible and used for medicinal purposes.

Adjacent to the main entrance of Building A on the northern side, a large empty area was commented on by the excavators that might have been some kind of "plaza." It has been compared with the open space just south of the acropolis at Lahun, and Wegner links it to a possible sanctuary that could have stood somewhere in the vicinity.²²⁴ However, none of the textual sources mention any sanctuary in addition to the mortuary temple.

8.2.5.4 *The production area between mortuary temple and town – the eastern debris field and the per-shena*

As mentioned in Section 8.2.5, when comparing the overall organization and layout of Lahun and Wah-Sut, one of the main differences that can be noted is the position of the mortuary temple in relation to the settlement. Whereas at Lahun the temple was directly attached to the southwestern corner of the western extension (Figure 8.20), there is a marked gap of about 250–300 m between the temple and the townsite at Wah-Sut. Today this seems like barren, empty space marked by the bleak desert surface, but the recent fieldwork at the site has revealed a major production zone covering about 6,000 m² (Figure 8.29).²²⁵ This production area was ideally placed for inhabitants of the town producing supplies and carrying out other manufacturing activities that served the temple and the town. The close link between the settlement and this zone can be further confirmed by the fact that several constructions here follow the exact same orientation as the townsite.²²⁶

The debris field can be followed from the temple's southeastern entrance, stretching northeast behind the area designated as *per-shena Senwosret*, the facility that functioned as the production center for the offerings needed for the mortuary cult of Senwosret III. Excavations along the eastern side of the mortuary temple have revealed several mud-brick buildings that constitute at least three separate phases of what has been identified as the actual *per-shena* institution.²²⁷ Also noteworthy in this respect is the frequent rebuilding of the existing mud-brick structures, which seem to have been much less permanent than any other elements of the mortuary

complex.²²⁸ The quick adaptation of such installations in relation to food production on an industrial scale can be witnessed by the large quantities of bread molds, trays, jars, and storage jars, as well as the multitude of mud jar stoppers.²²⁹

Thus, the settlement of Wah-Sut functioned as a major town, being closely linked to the royal tomb and the mortuary complex of Senwosret III. It was founded for this specific purpose and is closely connected via the production area and the per-shena to the mortuary complex. However, it is also clear that this town continued to exist after the cult for Senwosret III had ceased sometime during the end of the Thirteenth Dynasty. There is some evidence that it continued to be occupied until the early New Kingdom. Royal name sealings that have been excavated at Wah-Sut name four kings of the Thirteenth Dynasty, ending with Merneferre Ay, often cited as being the last ruler for whom building activities are attested in Upper and Lower Egypt, before Egypt was politically divided into different kingdoms.²³⁰ Another ruler dating to the Seventeenth Dynasty is also mentioned on the sealings, indicating that the town still existed during the Second Intermediate Period.²³¹ This evidence is further corroborated by pottery evidence and textual sources. A considerable quantity of sherds dating to the Second Intermediate Period and early New Kingdom was found in the medium-sized buildings E and G. In the tomb of Rekhmire at Thebes, which dates to the Eighteenth Dynasty, the name of Wah-Sut still features in a list of towns bringing taxes to the mayor of Thebes.²³² This is the last attestation of the site known so far. The continued existence of the town into the New Kingdom also makes much sense with regard to the close proximity of the mortuary complexes of Ahmose and his mother, Tetisheri.²³³ As first ruler of the Eighteenth Dynasty, Ahmose not only chose a historically significant site for his mortuary temple and pyramid but also seems to have made use of the existing infrastructure.

8.2.5.5 *Concluding remarks*

As far as the current archaeological evidence from the settlement of Wah-Sut is concerned, it is clear that it belongs to the category of state foundations with urban character, an observation based on the overall complexity and hierarchy of the settlement's layout but also on the sigillographic evidence naming a large number of high- and lower-ranking officials. It was evidently administered along similar lines as Lahun, with a mayor who stood at

the top of the local hierarchy being responsible for both the mortuary temple and the town. Nevertheless, some elements that are present at Lahun are clearly absent at Wah-Sut. For example, so far no evidence for any town wall has been found that could have controlled access to and from the town and served to delineate the boundaries of this settlement. Equally missing so far are any references in the textual records about a local temple of any kind that would have been different from Senwosret's mortuary temple. The missing part of the site, which should have contained the smaller houses, is also difficult to factor into any estimate about the ratio between small and larger houses. Given these gaps of information, the comparison between Lahun and Wah-Sut remains tentative, but there is no indication that Wah-Sut was founded for a purpose other than to house the staff and people who were in charge of the upkeep of the royal mortuary cult.

8.2.5.6 *Reconsidering the purpose and function of Lahun*

This detailed analysis of Wah-Sut provides further evidence that Lahun, in comparison, started out as a different foundation. Lahun had been conceptualized as a fully functioning urban center, laid out according to a plan that was chosen by the state for providing a new base of urban character, possibly for installing high officials involved in relevant administrative tasks near the entrance to the Fayum region, not too far from the royal residence at Lisht. Lahun's original foundation could have been intended as a kind of royal estate for controlling and exploiting agricultural land in the region. It kept this function but saw the addition of the western part when Senwosret II's pyramid and temple were built in this area, which had the advantage of using an already existing and well-established infrastructure. It could have then been transformed into a larger, more complex settlement supporting the upkeep of the royal mortuary complex in the vicinity when Senwosret II chose this area for his pyramid, while at the same time remaining an important administrative center for the Fayum region. As suggested above, Lahun might have only later been transformed into a mortuary town when the western part, called Sekhem-Senwosret, was added.

8.2.6 **Discussion of the role and purpose of town planning during the Middle Kingdom**

The various examples of Middle Kingdom settlements that were founded by the state provide a good insight into

the role town planning had during this time and how it had evolved from the Old Kingdom. The examples presented earlier show a variety of sites in different regions of Egypt that all had something in common: they were laid out according to an orthogonal grid system and included a repetitive pattern of building modules. This was done in a relatively simple way for the smaller settlements at Tell el-Dab'a and Qasr el-Sagha but could be adapted to a much more complex form and larger size, seen, for example, at Lahun and Wah-Sut. In addition to these foundations within the Egyptian territory, another major area of interest for the rulers of the Twelfth Dynasty was Lower Nubia, which saw its own kind of state effort for controlling an economically important zone in the south that had been appropriated by the Egyptians.

A system of large and heavily fortified fortresses was built along the river up to the south of the Second Cataract (Figure 8.33). The aim was especially to control river traffic but also the surrounding desert regions.²³⁴ These fortresses are a kind of microcosm in their own right. They display strong defensive characteristics, and their internal layouts show a strictly orthogonal layout, each fortress containing the same modules (with some variation in scale), such as granaries, barracks, administrative units, and residential quarters (Figures 8.34–8.36). Evidence for administrative activity and a close link to the royal residence in the Egyptian capital mainly comes from a large corpus of clay sealings that have been found during the excavations at these sites, especially at the fortresses of Uronarti and Askut.²³⁵

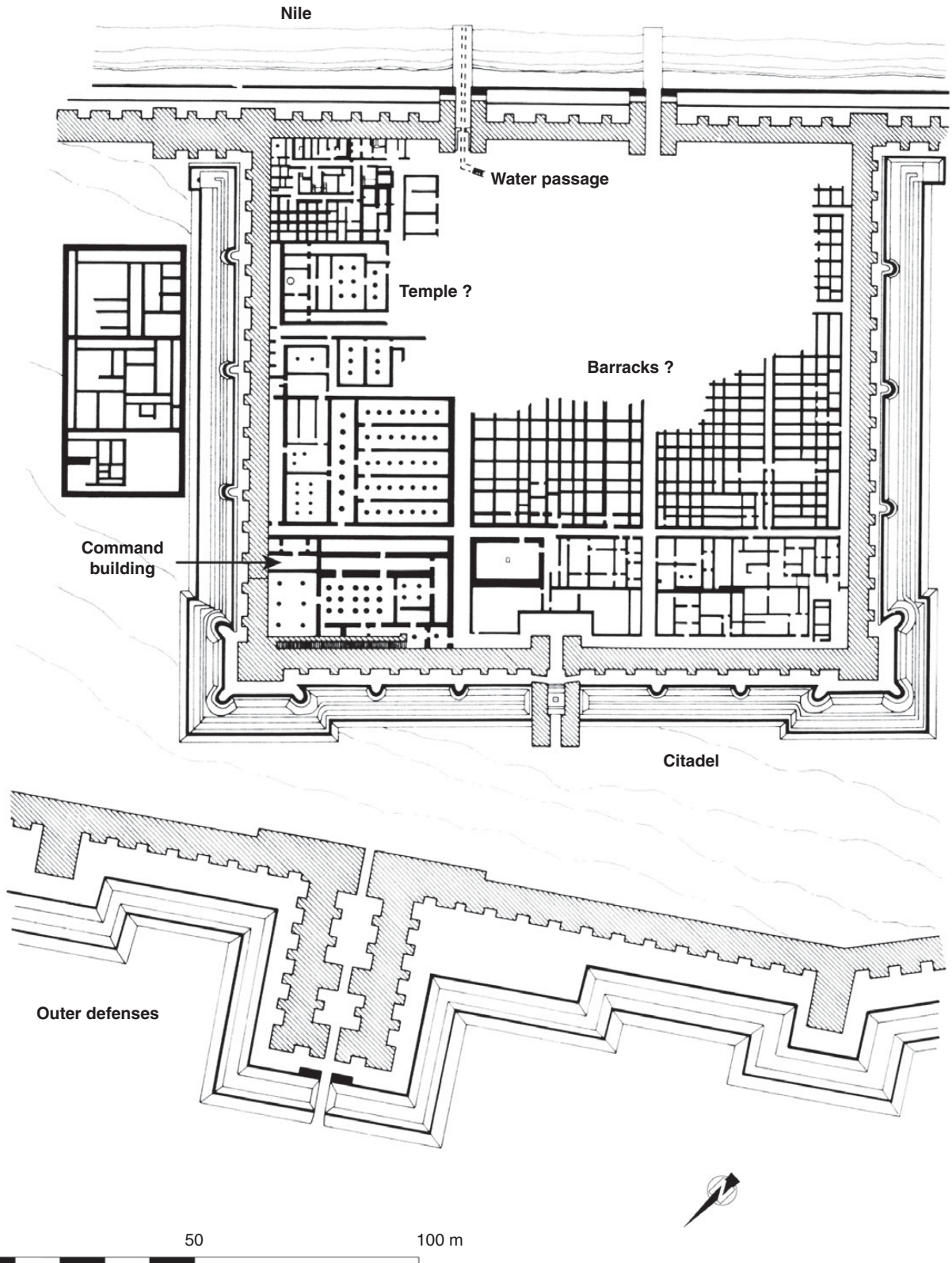
Their military purpose and heavy fortifications set them apart from a regular settlement, but they nevertheless exemplify an important model of an additional kind of planning activity of the Twelfth Dynasty, one that serves as a base for an Egyptian community consisting of administrators and soldiers.²³⁶ Most of the fortresses were almost fully excavated during the UNESCO salvage campaign in the 1960s, but much data about any surrounding local settlement and the precise interaction with the Nubian population is still to a large extent unknown. In the case of Buhen, for example, the area between the inner and outer fortifications was not excavated, and it is unknown whether any further settlement or installations existed here.²³⁷ If so, the fortress itself would have been an inner citadel with an outer settlement the size of an important townsite, covering almost 7 ha.²³⁸ At two fortresses in the Second Cataract region, Kor and Uronarti, a palatial complex has been discovered on the

exterior and at some distance to each fortress (Figure 8.37). These buildings were made of columned halls and large rooms and included open peristyle courts. Their use has been interpreted as that of “campaign palaces” for the king’s residency during expeditions into Nubian territory.²³⁹

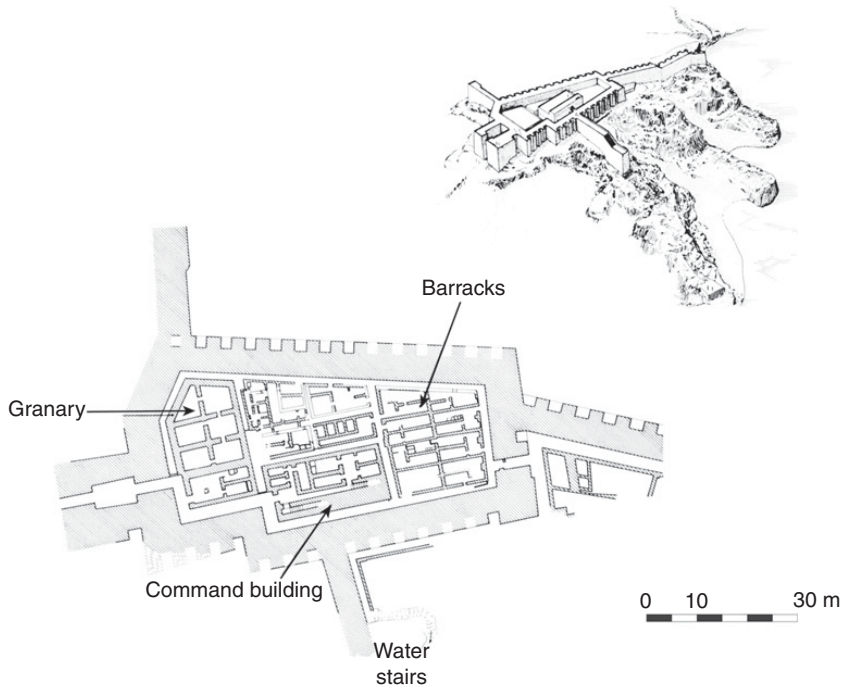
However, the evidence for installing various communities at newly founded sites that all have in common that they were laid out according to a strict orthogonal grid pattern by ignoring most of the local topography and being mainly situated in regions with little or no previous settlement paints an interesting picture of the Middle Kingdom rulers and specifically those of the Twelfth Dynasty. As Kemp has already pointed out when he called the Middle Kingdom a time when town planning was at its height,²⁴⁰ the strategic and economically important decisions of these rulers to implant new communities in marginal regions were met with astonishing success. Most sites were occupied for a long time, between 150 and 200 years, and only disintegrated with the political decentralization during the Second Intermediate Period. These Twelfth Dynasty rulers certainly created a new way for controlling and exploiting regions that had so far been marginalized and escaped attention as to their economic potential. They set up a system modeled closely on the administrative system that also characterized any other major settlement in the floodplain; this can be seen very clearly from the sealing corpora discovered at several such sites – for example, Elephantine, Tell Edfu, and Thebes in Upper Egypt. The recurrence of the same hierarchies and titles of the administrative system shows that the head of these towns was the mayor, who also had control over the local temple. The Old Kingdom system had been based on nomarchs controlling not only the major regional towns but also entire nomes. A conscious shift takes place during the Middle Kingdom, when the older system of nomarchs, who were in charge of entire provinces, is gradually replaced by a new one based on a smaller unit – the settlement system of the country.²⁴¹ There might have been some advantage to managing these smaller units, as no mayor would be able to control more than his town and some of the hinterland. It seems that these measures were of part of a major effort to restructure the administrative system under the Twelfth Dynasty. The following paragraphs present the evidence for towns and cities in the floodplain that developed along different lines and did not show any signs of official town planning. The emphasis on town planning for the analysis of Middle Kingdom settlements is to some extent related



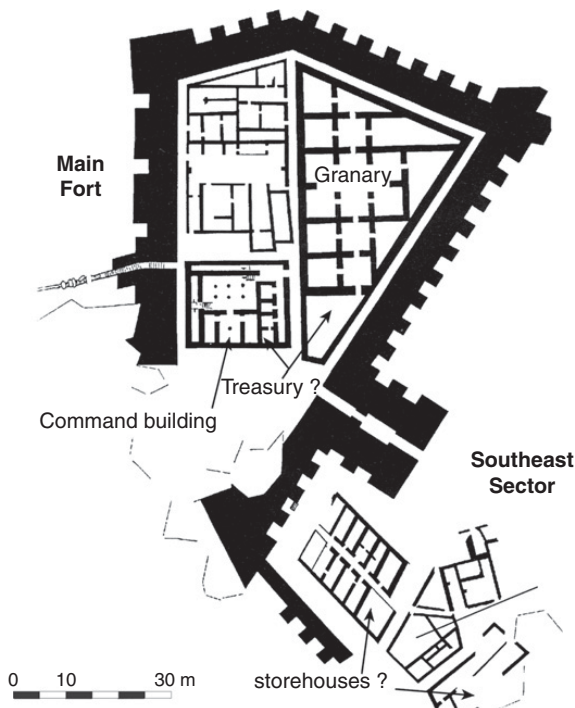
8.33. Satellite view of Lower Nubia showing the locations of the Middle Kingdom fortresses. By G. Marouard, using Google Earth™ (image NASA, image U.S. Geological Survey).



8.34. Citadel of the Middle Kingdom fortress at Buhen, Nubia. After B. J. Kemp, *Ancient Egypt. Anatomy of a Civilization*, London/ New York 2006 (2nd ed.), 232, fig. 85. Courtesy of B. Kemp.



8.35a. Middle Kingdom institutions at the fortress of Shalfak, Nubia. After B. J. Kemp, *Ancient Egypt. Anatomy of a Civilization*, London/New York 2006 (2nd ed.), 237, 87. Courtesy of B. Kemp.



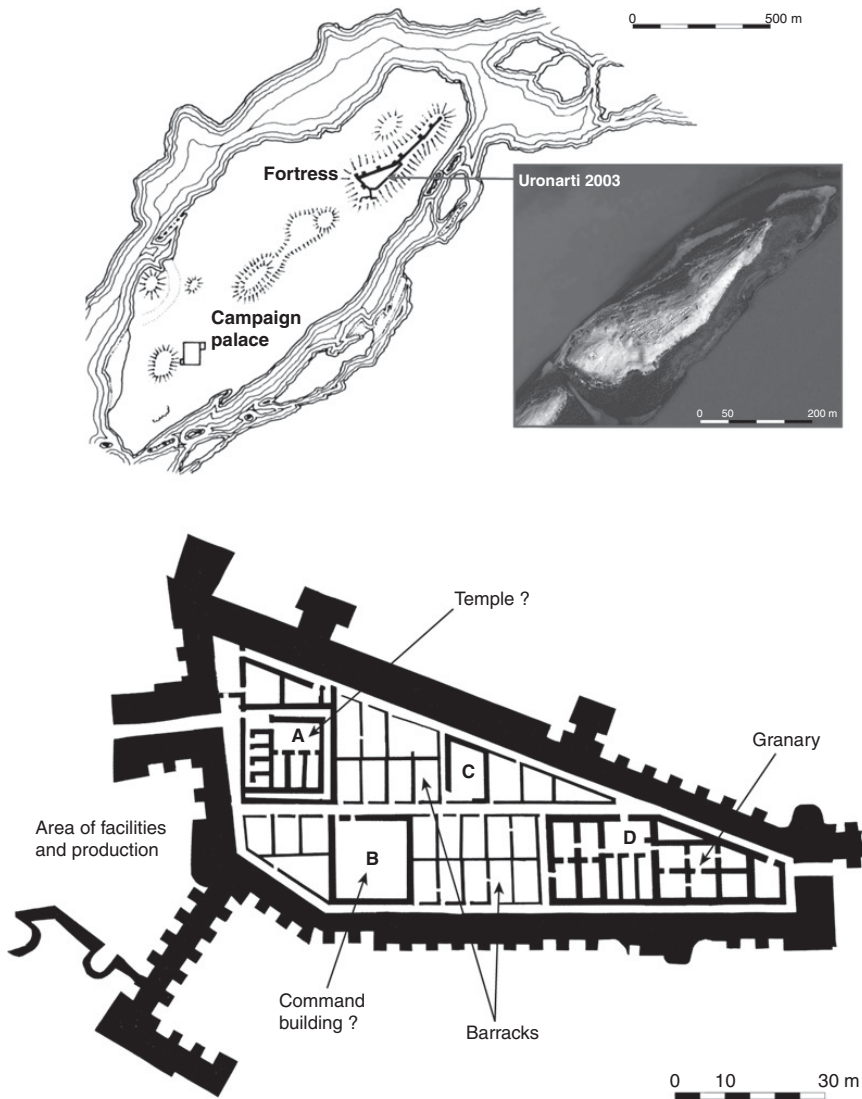
8.35b. Middle Kingdom institutions at the fortress of Askut, Nubia. By G. Marouard, after S. T. Smith, *Askut in Nubia: The Economics and Ideology of Egyptian Imperialism in the Second Millennium B.C.*, London/New York 1995, fig. 2.8.

to the uneven archaeological record, a situation that has favored the conservation of the state-planned sites that were in many cases located in more isolated areas and along the desert edge. Since Petrie's discovery of Lahun, these sites have also attracted more attention by archaeologists.

8.3 KARNAK: EVIDENCE FOR A MIDDLE KINGDOM CITY

Excavations in the temple precinct at Karnak revealed remains in many different areas of this vast temple complex settlement that had been deeply buried under later temple constructions (Figure 8.38).²⁴² The frequently accidental discovery of domestic structures underneath these temple buildings has provided some evidence for the location of the ancient city of Thebes that would have been surrounding the temple precinct of the Twelfth Dynasty. The Middle Kingdom remains were often overlain by structures of the Second Intermediate Period, indicating a continuous development without any major break during this time of political instability.

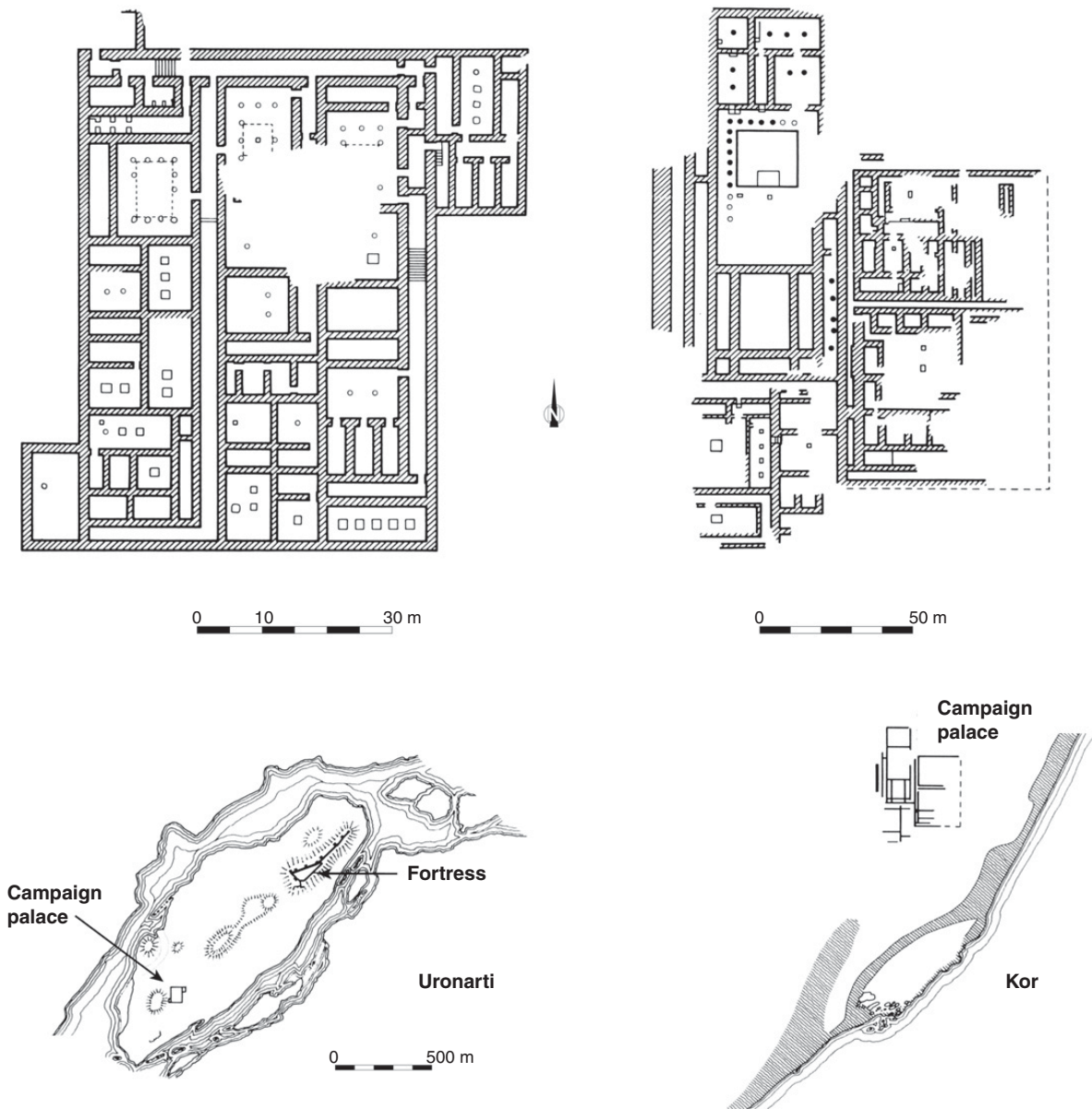
In most cases, only small areas have been excavated that do not allow for the identification of entire buildings or larger settlement areas, and only occasionally are further



8.36. Middle Kingdom fortress at Uronarti, Nubia. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after S. T. Smith, *Askut in Nubia: the Economics and Ideology of Egyptian Imperialism in the Second Millennium B.C.*, London/New York 1995, fig. 3.12; B. J. Kemp, *Ancient Egypt. Anatomy of a Civilization*, London/New York 2006 (2nd ed.), 242, fig. 89. Courtesy of B. Kemp.

details such as the presence of storage installations or enclosure wall fragments mentioned in the publications. In the area of North Karnak, close to the precinct of the temple of Monthu, Middle Kingdom and Second Intermediate Period settlement remains have been detected in two areas (Figure 8.38, nos. 4 and 9). Excavations to the western side of the enclosure of the Monthu temple revealed a small gate that had been attributed to Thutmose I but might actually date to the reign of Hatshepsut.²⁴³ To the north of this gate, a dense occupation of mud-brick buildings was excavated that are contemporary to it but clearly covering earlier

remains.²⁴⁴ These older settlement remains predate the New Kingdom occupation, but a more precise evaluation of the chronological framework was not possible before excavations on the eastern side of the Monthu complex revealed similar buildings with the same orientation. Jean Jacquet and Helen Jacquet-Gordon excavated the treasury of Thutmose I in this area and found further evidence for an earlier settlement here.²⁴⁵ In fact, the foundations of the treasury building are built on a leveled surface artificially created by cutting down some of the mound that stood in this area and sloped down toward the north. This leveled ground was partially paved over with mud

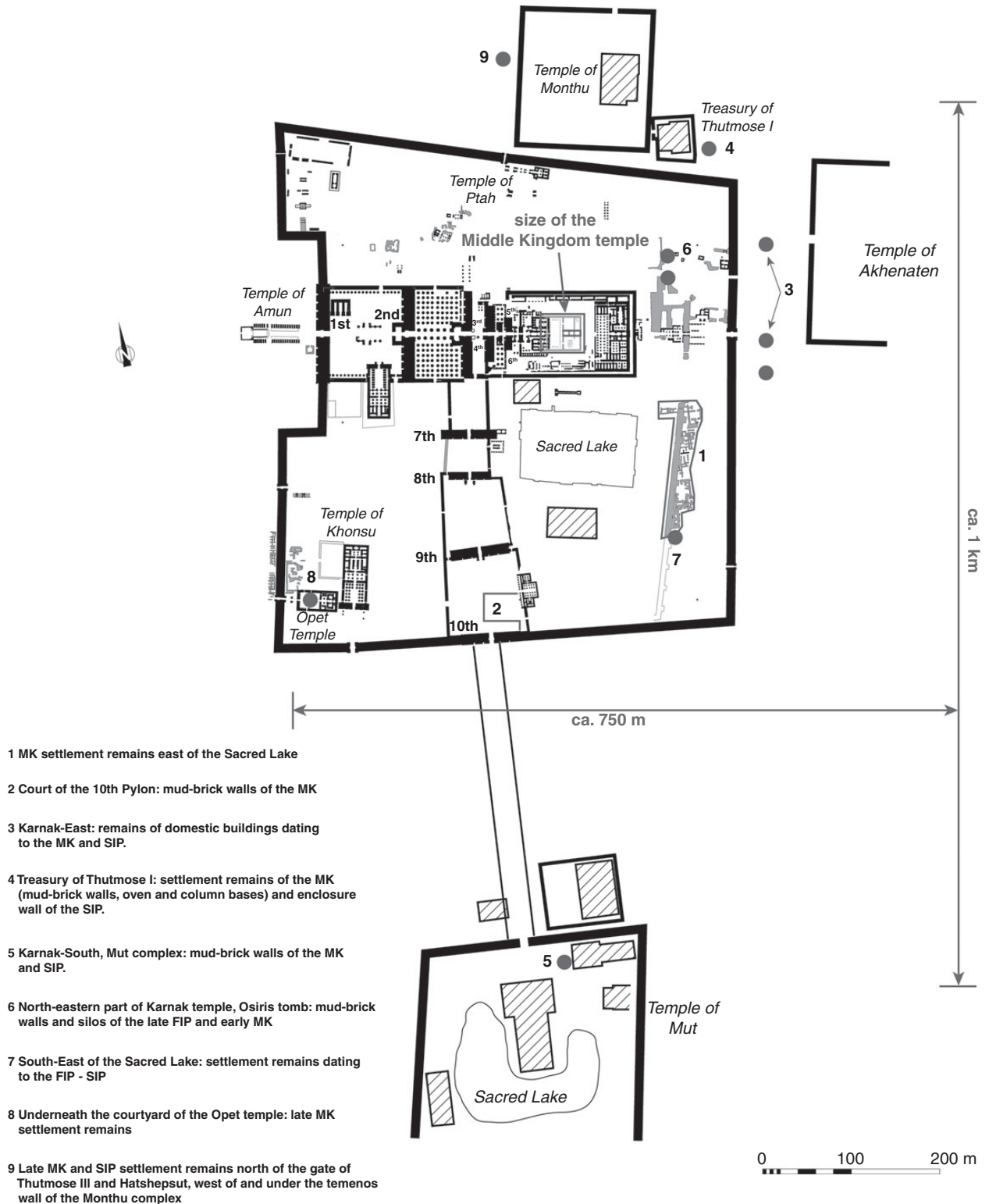


8.37. Middle Kingdom palatial buildings at Uronarti and Kor, Nubia. By G. Marouard, after B. J. Kemp, *Ancient Egypt. Anatomy of a Civilization*, London/New York 2006 (2nd ed.), 242, fig. 89. Courtesy of B. Kemp.

bricks, sealing the older structures beneath it. Several test trenches in this area led to the discovery of late Middle Kingdom walls, including a kind of enclosure/perimeter wall that ran for about 90 m in a north–south direction and had a thickness of about 1.5 m.²⁴⁶ Two pieces of Minoan Kamares were found, in addition to large amounts of storage vessels and mud jar stoppers. Most of the pottery from this area dates to the late Middle Kingdom.²⁴⁷ It is difficult to securely assess the nature of these settlement remains, and it is possible that

these were larger storage facilities belonging to an earlier temple precinct. However, some of the thin mud-brick walls to the east of the Thirteenth Dynasty enclosure wall resemble domestic buildings; these are light structures found in open courtyards and include smaller silos and the typical Middle Kingdom sinusoidal screen walls.²⁴⁸

The largest excavation area was dug from 1971 to 1973 by the Franco–Egyptian Center at Karnak when the new seating for the “Sound and Light Show” was constructed (Figure 8.38, no. 1).²⁴⁹ These rescue excavations revealed

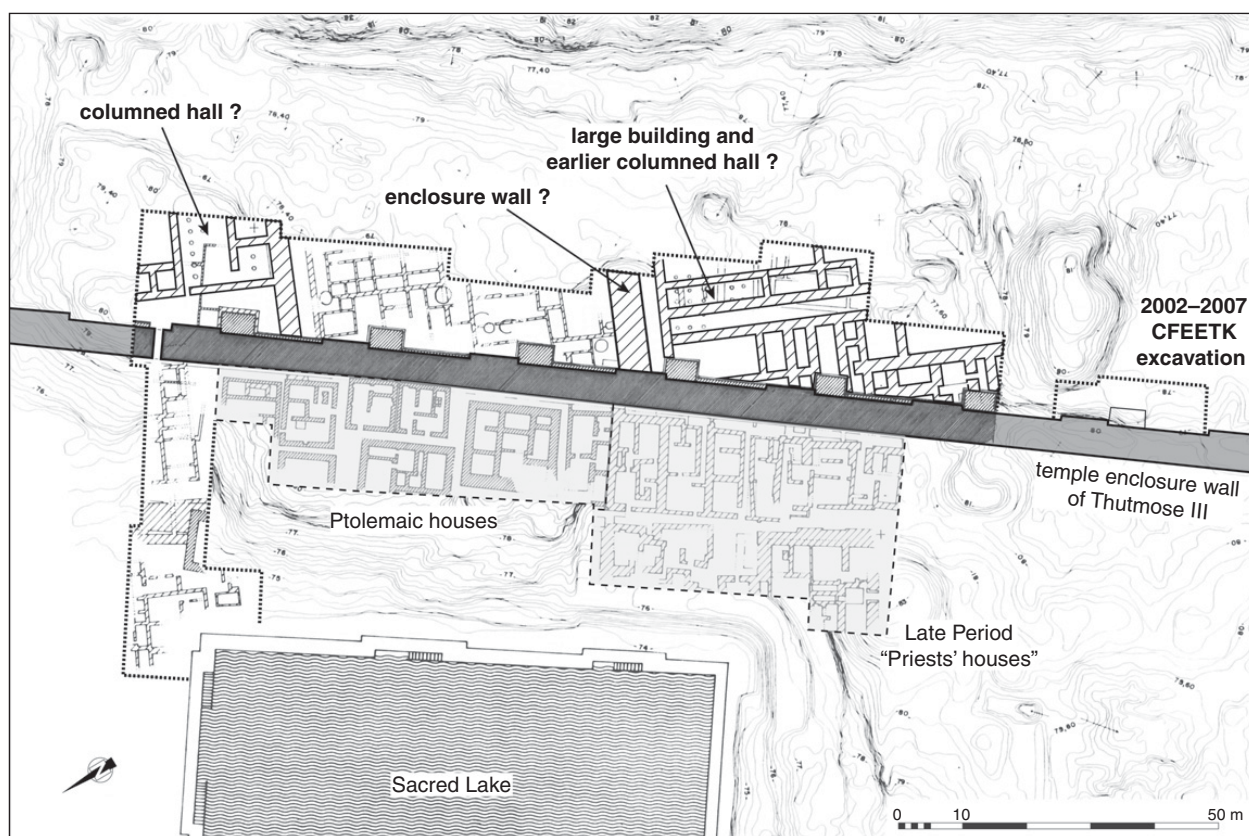


8.38. Location of the settlement remains at Thebes around the Karnak Temple during the Middle Kingdom and the Second Intermediate Period. By G. Marouard, after M. Millet, A. Masson, "Karnak Settlements," in W. Wendrich- *UCLA Encyclopedia of Egyptology*, Los Angeles 2011.

several superimposed settlement remains that further confirm the presence of an important town during the Middle Kingdom and the Second Intermediate Period in the area of Karnak. Along the eastern side of the buttressed enclosure wall of Thutmose III, a distinct zone of settlement has been excavated, including parts of a thick mud-brick wall that must have functioned as an enclosure according to its thickness of 5 m.²⁵⁰ Four settlement phases were recorded, of which phases 1 and 2 were quite similar and showed mud-brick walls orientated in an east–west direction, including the 5 m–thick enclosure wall. This wall seems to separate an area marked by larger buildings and several columned halls, resembling building complexes of palatial character, from another area to its northern side that shows the presence of smaller buildings made with thinner walls (Figure 8.39). To the north of the latter, another large building complex with a columned hall can be seen on the plan (Figure 8.39). It seems that an elite-style settlement quarter, possibly of administrative character, had once stood here, which

appears to be further confirmed by the discovery of late Middle Kingdom sealings in this area.²⁵¹ Beneath these settlement layers, some evidence for even earlier structures has been found that can be dated to the First Intermediate Period/early Middle Kingdom.²⁵² Recent excavations conducted by Marie Millet south of this zone confirmed the presence of late Middle Kingdom settlement remains and a long period of occupation dating back at least as early as the First Intermediate Period.²⁵³ In 2003, another small excavation area was opened to the south of the Sacred Lake (Figure 8.38, no. 7); this provided evidence for a continuous stratigraphic sequence confirming long-term settlement activity here too. Various silos and a production facility for bread have been excavated in this zone.²⁵⁴

To the north of the Sacred Lake area and in the northeastern part of the Amun precinct at Karnak, further traces of early settlement have been located (Figure 8.38, no. 6). During the excavations underneath the much-later Osiris cemetery, some First Intermediate Period/



8.39. Middle Kingdom settlement remains east of the Sacred Lake at Karnak. By G. Marouard, after J. Lauffray et al., “Rapport sur les Travaux de Karnak,” *Cahiers de Karnak* 5 (1995), 27, fig. 13.

early Middle Kingdom pottery and wall fragments have been uncovered.²⁵⁵ Along the exterior of the Karnak Temple, to the east of the main enclosure wall, the Canadian mission directed by Donald Redford has carried out excavations at the temple complex of Amenhotep IV and stumbled upon older domestic buildings (Figure 8.38, no. 3).²⁵⁶ In several excavations squares, mud-brick buildings and open courts with sinusoidal screen walls have been revealed.²⁵⁷ Redford and his team have also found evidence for another remnant of a large enclosure wall with a width of 6 m running in a north–south direction.²⁵⁸ This wall might have marked the eastern limit of the ancient city of Thebes during the Middle Kingdom.

Underneath the foundations of the Opet temple, which lies to the southwest of the temple of Khonsu, a large amount of discarded late Middle Kingdom clay sealings were discovered, suggesting the presence of an administrative institution somewhere in the vicinity. Similarly, further wall remains dating to the Middle Kingdom were also found underneath the court of the tenth pylon and at the Mut temple precinct to the south (see Figure 8.38, nos. 2 and 5).²⁵⁹

These results suggest the presence of a major city at Thebes during the Middle Kingdom, which coincides with the time when the temple of Amun starts to play an important role on a national level. If all the areas in which Middle Kingdom settlement remains have been found connect on a wider level, the city of Thebes would have extended over an area of about 75 ha.²⁶⁰ In addition, there seems to be good evidence for a continuation in the occupation of this settlement during the Second Intermediate Period. So far, not enough detailed archaeological data is available that could shed more light on the organization of this city, the different settlement quarters, and the structures linked to the temple administration.

8.4 THE TOWN OF ELEPHANTINE DURING THE MIDDLE KINGDOM

The town of Elephantine, which is located on an island in the First Cataract region, saw a continuous occupation throughout the third millennium BCE. By the early Middle Kingdom, Elephantine was the largest town in this region, occupying more than 5 ha, which included the entire eastern island and parts of the western island. Both were now easily accessible and could be used for settlement because the depression that once separated the islands had been artificially filled up during the early

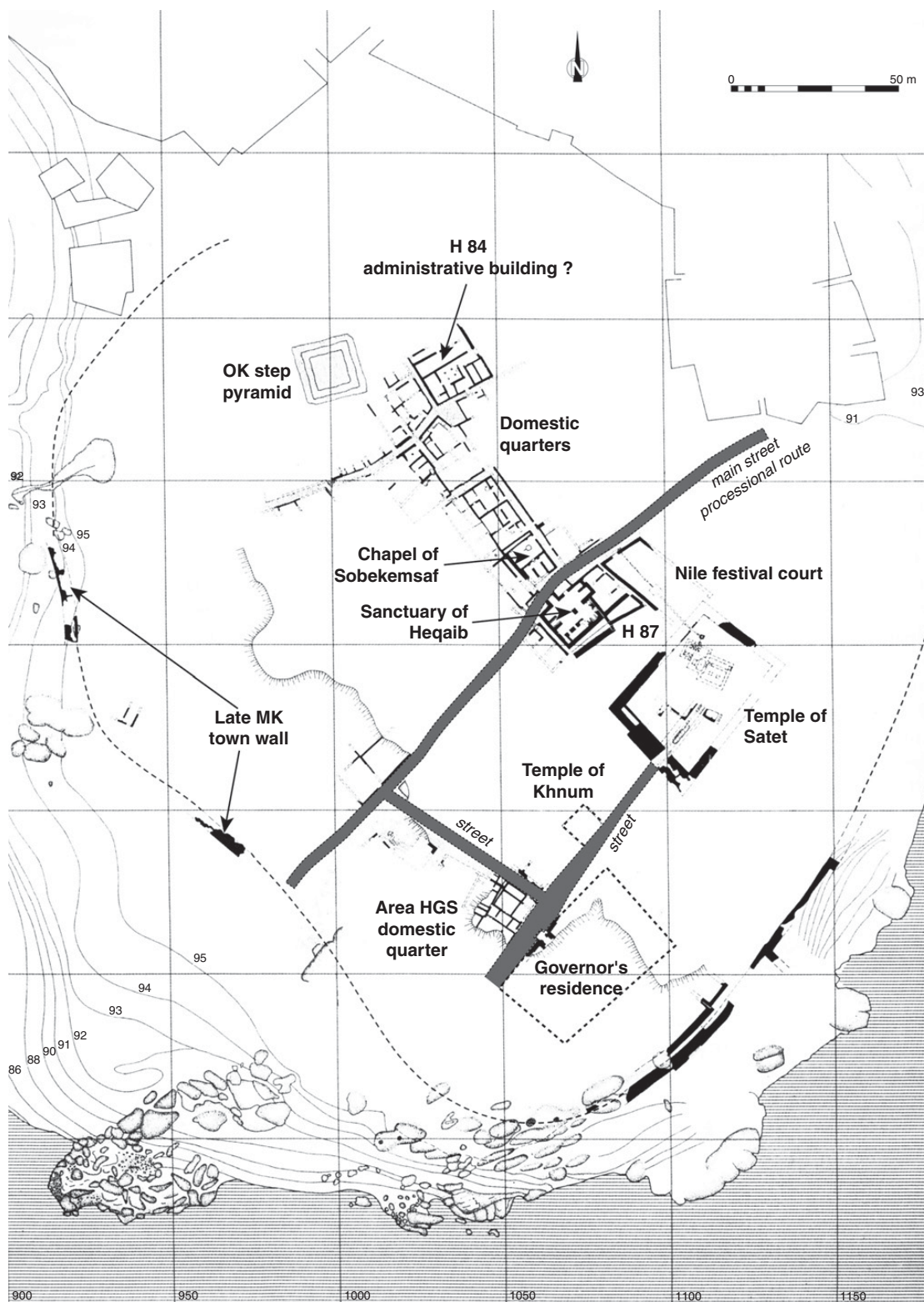
Middle Kingdom (see Figure 8.40). The growth and prosperity of the town of Elephantine was linked to several factors, such as its strategic position as a border town and the presence of important raw materials in the region (for example, red granite) but also the access to trade routes leading into Lower Nubia and into the Western Desert through the oasis of Kurkur.²⁶¹

The German archaeological institute (DAI) focused on excavations of the Middle Kingdom settlement remains during several seasons' work conducted from 1986 to 1990 by investigating a relatively large exposure, especially along the northwestern part of the site.²⁶² A smaller excavation area was also opened up on the southeastern part of the island, just south of the later temple of Khnum.²⁶³ The chronological framework stretches from the early Middle Kingdom (Eleventh Dynasty) until the late Second Intermediate Period (end of the Seventeenth Dynasty). Each of the excavated structures was analyzed according to its principal building and occupation phases, which have been defined as a sequence of *Bauschichten* to which an approximate date within the ancient Egyptian chronology has been assigned.²⁶⁴

The excavations at Elephantine contribute significantly to our knowledge of how “organically” developed settlements were laid out and functioned at a time when the Egyptian state was making major efforts in new settlement foundations according to important strategic and economic considerations. It can certainly be considered one of the few townsites where an in-depth study on the general organization and layout of an ancient town, including its development over time, can be pursued.

8.4.1 The evidence for enclosure walls at Elephantine

Although there has been some discussion about whether Elephantine can be considered a typical ancient Egyptian settlement or whether its border and island location necessitates its classification under a different category such as a “fortress” or “fortress town,” the category seems to vary for different time periods. For the Middle Kingdom, there is a debate concerning the presence or absence of enclosure walls at this site and the mention of Elephantine in several contemporary textual sources under the heading *menenu* (*mmw*), a term conventionally translated “fortress.”²⁶⁵ For example, stela BM 852, which dates to Senwosret III, designates Elephantine as *mmw*, is taken as evidence for it having been a fortress at that time. The text also mentions the possible cutting of a water channel in the First Cataract



8.40. Late Middle Kingdom settlement at Elephantine. By G. Marouard, after C. von Pilgrim, “Elephantine – (Festungs-)Stadt am Ersten Katarakt,” in M. Bietak, E. Czerny, I. Forstner-Müller (eds.), *Cities and Urbanism in Ancient Egypt*, 2010, 258, Abb. 1. Courtesy of C. von Pilgrim.

region, the erection of storerooms (?), and the assembling of troops at Elephantine in anticipation of a planned military campaign.²⁶⁶

Additional evidence for Elephantine being called a *menenu* comes from the Ramesseum onomasticon, where it is listed together with the Middle Kingdom fortresses in Lower Nubia, which can be clearly identified as such according to the archaeological evidence (see previous discussion). However, Elephantine is mentioned a second time in this document under the heading of “settlements.”²⁶⁷ The archaeological remains do not provide any evidence for the presence of fortified structures at Elephantine during the Middle Kingdom, and this stands in stark contrast to the evidence from the Nubian forts. Thus, the term *menenu* does not seem to refer to the architectural layout of a fortress. Possible solutions to this debate could be that this term relates either to an administrative status or a fortified settlement within the border region in more general terms or simply to a military base. The latter would be the most plausible explanation in view of the current evidence and the correlation between textual and archaeological sources. Recent reinvestigations of the enclosure walls at Elephantine provide clear evidence for the presence of a late Twelfth Dynasty mud-brick enclosure wall with a thickness of 3 m that surrounded the whole settlement.²⁶⁸ This wall apparently remained in use until the early Eighteenth Dynasty, thus persisting through the whole Second Intermediate Period. It is interesting to note that this fortification dates to a time when Egypt had control over Lower Nubia and the southern Egyptian border had been established south of the Second Cataract region. It is not possible to draw a direct link between the loss of control and gradual disintegration of the Egyptian state sometime during the second half of the Thirteenth Dynasty and the measure of fortifying the settlement at Elephantine, since the enclosure already existed prior to this time.²⁶⁹ From a purely architectural point of view, the town wall at Elephantine is in no way different to the town walls at Tell Edfu or even Lahun, whose respective widths also lie around 3 m, without any additional evidence for defensive architecture such as buttresses or protected entrance gates.²⁷⁰ Archaeological evidence for several phases of town walls can also be found at Elkab, and these date to the Old Kingdom and First Intermediate Period according to recently obtained radiocarbon dates.²⁷¹ Textual sources seem to be the only informative source reporting on Middle Kingdom remains there, such as the building activity under Senwosret II and Amenemhat III, which seems to have included a major wall.²⁷² A slightly later tomb

inscription mentions the existence of a fortified enclosure dating to the Seventeenth Dynasty.²⁷³ Thus, the evidence from Elephantine fits well into the wider picture of walled settlements during the Middle Kingdom without having been specifically designated as a fortress. The only difference to other sites in Upper Egypt is its island location within the First Cataract region, and this can be considered a somewhat protective setting for a settlement.²⁷⁴ Evidence exists for an additional fortification measure in the First Cataract region, probably dating from the Second Intermediate Period. Remains have been recorded of a large wall on the east bank of the Nile, opposite Elephantine island, that nowadays lies within the heart of modern Aswan. This wall seems to have extended over a distance of more than 7 km in a north–south direction.²⁷⁵

As outlined earlier, Elephantine had by the Middle Kingdom developed into an urban center covering most of the eastern and western islands, which had “grown together” by early Middle Kingdom times. The actual center of this town lay on the eastern island, settled since the Predynastic Period and having developed over time into a town covering most of the inhabitable, flood-free area to a size of about 2.3 ha. This long-term settlement activity has also led to the gradual formation of a tell mound due to the constant rebuilding of mud-brick structures and the common trash disposal patterns over time. Some of these areas were regularly leveled off when larger blocks or areas were restructured and rebuilt, keeping the ground level from continuously growing in height.²⁷⁶ This was an effective measure for controlling the height of occupational remains on this island location in the long term. The Middle Kingdom settlement was situated on a higher elevation on the eastern portion of the island than on the western one, where a settlement quarter developed next to earlier cemetery remains that stayed at a lower level. This northwestern expansion of the settlement during the early Middle Kingdom lay not only next to but partially on top of the older cemetery, which had occupied the former western island from the late Old Kingdom onward. There is some evidence that parts of this zone were still being used as a cemetery during the Middle Kingdom. The close proximity of cemeteries to the respective towns and cities was certainly a common phenomenon during the third and second millennium BCE.

8.4.2 The location of temples and sanctuaries

The Middle Kingdom town also offers insight into the presence and functioning of several sanctuaries and

temples within the wider context of the settlement. The settlement on the eastern part, which could be considered the old center of the town, is characterized by the presence of several sanctuaries that were situated along the northern side of the island and formed a distinct “temple quarter” (Figure 8.40). The largest complex in the Middle Kingdom was the temple dedicated to the goddess Satet, which had its own temple enclosure wall. To its western side lay the sanctuary for Heqaib, and to the south possibly a sanctuary of the god Khnum, which is still buried under the later temple structures.²⁷⁷ These buildings provide good evidence for the presence of several important cult installations within the ancient town, which had seen a gradual evolution from a tiny sanctuary for Satet founded between the natural granite boulders during the Early Dynastic Period.

The temple of Satet, as the main temple dedicated to the local deity of the town, saw a complete rebuilding during the reign of Senwosret I, who considerably enlarged the older structure of the Eleventh Dynasty and also founded the adjacent Nile festival court, which played an important role in religious festivals associated with the announcement of the Nile flood.²⁷⁸ The court contained a water tank that might have also been used by the inhabitants of Elephantine, and if that is indeed the case, it might be one of the rare examples of a “public” installation.²⁷⁹ The evidence for the cult of Khnum, another important deity of the First Cataract region, was first contained within the temple of Satet, where a side chapel was assigned for his veneration. The presence of a cult for Khnum within the temple of Satet continued at least up to the reign of Antef III of the early Eleventh Dynasty, and while the evidence in the new Satet temple constructions under Mentuhotep II and III is inconclusive, a chapel for Khnum was certainly no longer included in the new sanctuary built by Senwosret I.²⁸⁰ Therefore, it can be assumed that a separate temple or chapel for his cult existed in the area of the later New Kingdom temple building from the Twelfth Dynasty onward.²⁸¹

Outbuildings for these cult installations lay in the vicinity but not directly within the area enclosed by the Satet temple wall, which left almost no space between the actual temple building and its enclosure (see Figure 8.40). Between the Nile festival court to the north and the sanctuary of Heqaib to the south, a large house (H87) was excavated that seems to have been converted over time into a complex with outbuildings and a production area probably supporting activities in the sanctuaries. This is indicated by the presence of

numerous storage installations and traces of a stone workshop.²⁸²

The sanctuary of Heqaib became an official state-approved and supported installation that was added to the temple precinct in the northern part of the eastern island under Antef III.²⁸³ Here a cult dedicated to Heqaib – the local saint who had been a former governor of Elephantine during the Sixth Dynasty – was established, and it grew into a major sanctuary where the local elite of Elephantine and also officials from other parts of the country made pious donations and erected statues.²⁸⁴ This led to a gradual enlargement of the sanctuary structure in the course of the Middle Kingdom.²⁸⁵ However, by the end of the Thirteenth Dynasty, which saw the dissolution of the central government at Itj-Tawy, new donations to the Heqaib sanctuary were made mainly by officials from the Theban region. This clearly reflects the fragmented political situation in Egypt at the time.²⁸⁶ Further insight about how such developments affected the local town administration at Elephantine can be gained from the inscription of a temple scribe called Khnumhotep, who mentions “a time without mayor” at the town,²⁸⁷ probably encompassing the transitional period between the end of the Thirteenth Dynasty and the early Seventeenth Dynasty when the centralized state and the administrative system had broken down and were not yet reconfigured by the rising Theban rulers of the Seventeenth Dynasty. This could be an indication that the office of the mayor – who in most instances also held the highest position in relation to the temple administration – was to some extent dependent on the central government. A close parallel for the veneration of a local dignitary comes from Edfu, where an Old Kingdom governor and nomarch called Izi also became a local saint with a dedicated cult after his death. Although it has not been possible to identify a separate state-funded sanctuary for his cult within the townsite, his tomb, which lies along the western limits of the ancient town, was a major cult place until the end of the Second Intermediate Period. This can be witnessed by the large number of stelae and offering tables found there.²⁸⁸

One last private cult installation that is situated close to the temple quarter at Elephantine was erected by a priest (*hḫm-nṯr*) called Sobekemsaf, who built a chapel for his *ka*-cult on the opposite side of the street, just to the west of the Heqaib sanctuary, during the late Thirteenth Dynasty.²⁸⁹ This building is characterized by a rectangular courtyard that gave access on its eastern side, through a central doorway, to three small chapels with vaulted ceilings (see Figure 8.43). What remains of an inscribed doorframe that once was part of the main entrance in the

axis of the central chapel provides the titles and a short biography of Sobekemsaf.²⁹⁰ This sanctuary might be interpreted as the last stage of a longer tradition by the local elite, who constructed their own cult places close to or in the temple quarter. The location of Sobekemsaf's chapel was certainly chosen according to the proximity to the other temples on the eastern side. It was also bordering the main street of the town, which provided the opportunity to directly participate in major religious festivals that used this street for processions.

The evidence from Elephantine clearly shows a cluster of religious installations in a distinguished part of the town that were interconnected by the main street, providing good proof for the existence of numerous sanctuaries within major towns and cities, a feature that became typical for urban centers from the Middle Kingdom onward. This seems to have been a time when local temples in the provinces were increasingly integrated into the wider state administration and became important religious institutions of economic importance, a development that saw its heyday during the New Kingdom.

8.4.3 Official buildings of an administrative nature

As has been elaborated for the Old Kingdom settlements, it is not an easy task to identify within the archaeological record administrative structures and buildings that might have functioned as institutions. This is related to the multifunctionality of buildings, which served domestic, production, and administrative activities all in a single structure. To some extent this is also the case during the Middle Kingdom, as the large mansions at Lahun and the mayor's residence at Wah-Sut so clearly demonstrate. The seat of the local mayor has also been located at Elephantine. The mayor's residence dominated the highest point in the southeastern part of the town and was situated at a prominent position overlooking much of the island (Figure 8.40). It is also possible to occasionally spot a building that might have had a use dedicated primarily to administrative purposes. Storage facilities are the most easily recognizable constructions of this type.

The governor's residence (Building H2)²⁹¹ at Elephantine dates back to the Old Kingdom and was continuously occupied until the end of the Middle Kingdom, indicating much continuity in the use and function of this important administrative complex.²⁹² Most of the internal parts of this building have been completely destroyed by the sebbakhin, and only its western wall with the main entrance has been preserved,

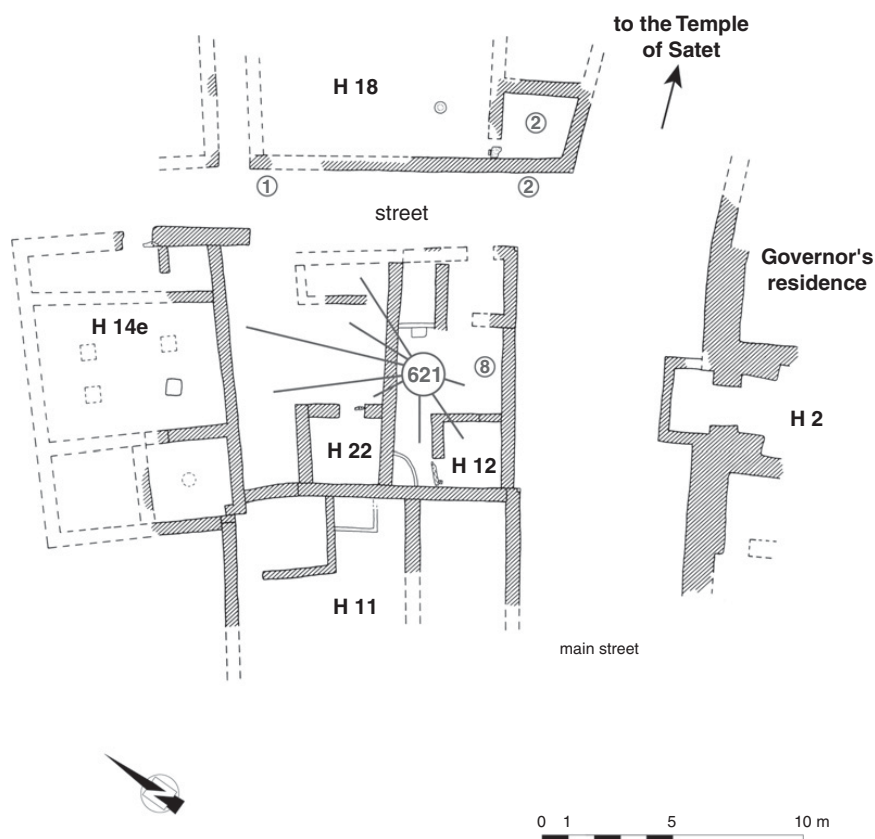
which unfortunately makes any analysis of the interior layout impossible (Figure 8.41).

Two construction phases for the Middle Kingdom can be distinguished for Building H2. In the Eleventh Dynasty (Bauschicht XV), the street in front of the building was considerably reduced in width by several mud-brick walls that had been built in front of the main entrance. The exterior street level had grown to a considerable height of about 1.1 m above the old stone entrance threshold. In order to protect the entry, a small square anteroom equipped with brick benches was built, which had stairs leading down to the doorway.²⁹³ Additional walls in front of the entrance can be observed for the Eleventh and Twelfth Dynasties, and these prohibited a direct access to H2 from the street.²⁹⁴

During the early Twelfth Dynasty (Bauschicht XIV), the governor's residence was completely rebuilt. Its eastern wall was not only increased in thickness to 1.5 m, but it was also constructed of high-quality mud bricks.²⁹⁵ Another wall created a kind of anteroom in front of the stairs leading down to the main entrance of H2. In the late Middle Kingdom (Bauschicht XIII), this entrance was closed off by a mud-brick wall and the original width of the street was restored (Figure 8.41).²⁹⁶ It is not possible to tell whether a different entrance took over the function as principal access into H2 or whether it had been abandoned by that time.

The governor's residence would have functioned as the heart of the town administration, being the seat of the local mayor, who also held the title of overseer of priests as the highest temple authority. Modern sebach digging destroyed most of Building H2, which would have contained residential quarters, storerooms, and production areas such as the bakery facility.²⁹⁷ Thus, the whole eastern part of Elephantine can be described in terms of discrete urban zones according to the separation of the various official religious and economic institutions – including the governor's residence – which pattern seems to have had parallels in the general layout and organization of other towns in the Nile Valley.²⁹⁸ How does this layout compare with the western part of the settlement, which was newly developed during the Middle Kingdom?

Excavations along the northwestern margins of the Middle Kingdom settlement, close to the much-older step pyramid, have uncovered a large mud-brick building (H84). This complex has been interpreted as an example of an official distribution center, known from textual sources as *khetem* (*htm*), that was administering



8.41. Late Middle Kingdom houses southwest of the governor's residence at Elephantine showing distribution and size of sealing deposits (Area HGS, Level XIII). After C. von Pilgrim, *Elephantine XVIII: Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, AV 91, 1996, 258, Abb. 111. Courtesy of C. von Pilgrim.

short-term storage of various types of commodities (Figure 8.40).²⁹⁹ In view of this interpretation, a closer analysis of the precise layout deserves some detailed discussion here.

The architectural plan of H84 is characterized by the presence of a large open courtyard in its center that was equipped with two rectangular cellar installations; additional storage facilities were found in the adjacent rooms (Figure 8.44).³⁰⁰ The court had been equipped with several columns along its western and southern sides, giving it the appearance of a simple peristyle court.³⁰¹ The main access to the courtyard was from the eastern street, where a small stone-paved area was found in front of the threshold leading directly into the open courtyard. In comparison, none of the other large Middle Kingdom houses has such a direct access to its central courtyard from the exterior street level. There was usually a room or corridor that had to be crossed before entering the interior courtyard.³⁰² Further rooms were arranged along the sides of the courtyard in H84, a layout resembling that of

domestic buildings of the house-courtyard type.³⁰³ The various cellars, magazines, and silos found in the courtyard and adjacent rooms can also be compared in size and layout with storage installations of domestic contexts.³⁰⁴ Thus, the principal differences between H84 and other mud-brick houses are the entrance situation and the higher number of storage facilities that were present here. The total capacity of the existing storage installations was calculated to have been between 16 m² and 24 m², depending on the three building phases, which is larger than the storage facilities found in the domestic houses of this town quarter.³⁰⁵ Although this could be a first indication shedding light on the actual role and function of H84 within the late Middle Kingdom town, its storage capacity has been somewhat overstated, especially in comparison with official storage installations elsewhere – for example, the granaries present at Lahun and Wah-Sut. The ten-chambered granary of the mayor's residence at Wah-Sut alone covered more than 155 m². A later example of a major grain storage installation

consisting of a large courtyard silo has recently been discovered in the town center of Tell Edfu; this one also largely exceeds the capacity found at H84.³⁰⁶

This information does not diminish the possibility of H84 having been used for administrative activity as well as storage, but it certainly demands some caution when interpreting the role of this building within the ancient town. It can also be observed from the published plans of H84 that the storage installations are not particularly organized or even of a size important enough to justify its identification as a major official institution such as the *khetem*. Examples of official storage installations in the Middle Kingdom only come from the Nubian forts and state-planned settlements, which admittedly might not always provide the most adequate comparison for a provincial town such as Elephantine.³⁰⁷ Another example of an official storage facility was found in the eastern Delta at the settlement of Tell Hebua. Several large open courtyards containing numerous round grain silos and a separate area with rectangular magazines have been excavated that occupied a large area along the margins of the town.³⁰⁸ The scale and organization of the storage facilities at Tell Hebua also show a marked difference to building H84 at Elephantine, as does the silo court at Tell Edfu mentioned in the previous paragraph.

Another unusual architectural feature was noted during the excavations of H84. Attached to the southeast corner of H84 was a square structure with thick mud-brick walls and a central pillar (H85), interpreted as a staircase and tower construction, possibly with multiple floors (Figure 8.44).³⁰⁹ The archaeological remains of both buildings were found in a relatively fragmentary state because of later destructions in this part of the excavation area, which have rendered a detailed stratigraphic analysis difficult. Therefore, the precise link and stratigraphic relationship between H85 and H84 has only been tentatively established.³¹⁰ Apart from these architectural peculiarities such as the square construction (H85), currently identified as a tower by the excavator, and the various storage facilities and vaulted cellars in and around the courtyard, a large concentration of broken clay sealings has been found within these buildings (H84 and H85). This find has been used as an additional argument for asserting the administrative function of this complex.³¹¹ While the occasional clay sealing came from layers directly associated with the actual use of the building, the largest amount, with more than 1,200 broken clay sealings, was found in a trash deposit filling the foundations of H85 (Figure 8.44).³¹² Another large

deposit has been discovered in one of the square storage cellars within the courtyard of H84.³¹³ Most of the sealing contexts are not primary ones and therefore provide little direct evidence for exactly where the sealing activity took place. However, it is very likely that the sealings were discarded during administrative activities carried out somewhere in the vicinity or even within H84. As can be seen at other sites too, the deposition of broken clay sealings usually occurred on the exterior of such buildings as a result of cleanup activities. This can be witnessed, for example, at the Nubian fortresses of Uronarti and Askut but also along the exterior wall of the mortuary temple of Senwosret III and Building A at Wah-Sut in South Abydos.³¹⁴

Nevertheless, these sealings also do not provide conclusive evidence in support of H84's identification as a *khetem* institution, which has been proposed by von Pilgrim.³¹⁵ The *khetem* is mainly known from textual records, which provide few details about this institution during the Middle Kingdom and its function. In one case, the term *khetem* was used for a storage facility for luxury goods attached to the royal palace, while in another it was part of a large domain that included the storage of more-common commodities such as grain, flour, and dates.³¹⁶ Based on ancient documents dating to the Middle Kingdom, this type of magazine facility seems to be relatively rarely mentioned in comparison with other storage facilities. Another context in which the *khetem* has been mentioned relates to textual records at Deir el-Medineh dating to the late New Kingdom.³¹⁷ Here the *khetem* has been linked to several functions in relation to the inhabitants of the workmen's village, such as being used as the place for the distribution of rations and the storage of provisions.³¹⁸

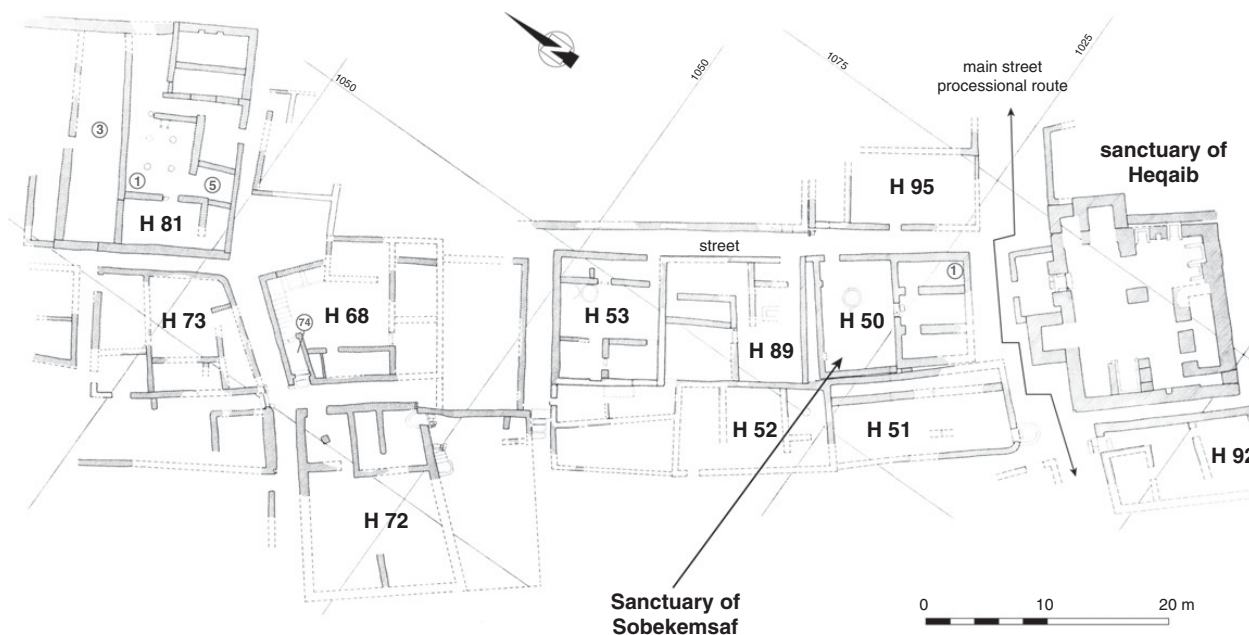
At Elephantine, none of the sealings found in the deposits from H84 and H85 provides concrete evidence for this institution, because there are only two sealings from H84 that might have shown the title "Overseer of the *khetem*."³¹⁹ This, in conjunction with the archaeological evidence presented earlier, shows that there is no conclusive evidence for identifying H84 as a *khetem* institution at Elephantine. Other explanations as to its function need to be considered too. For example, it could have served as a communal storage facility shared by the people living in the neighborhood. Although it is evident that H84 had been equipped with a higher number of storage installations than usually found in private houses, none of them compare well with official storage facilities known from other sites. The layout and quality

of the bins, cellars, and magazines resemble much more that of a private facility. In addition, there is no conclusive evidence with regard to the excavated sealings mentioning a khetem, and only very few pieces belong to the type of square institutional stamp seal that were typically used by institutions and the highest officials in the town, which is noteworthy. Thus, as the current evidence stands, H84 can only tentatively be assigned an economic function in comparison with the surrounding houses, and it is not possible to justify its identification as a khetem institution.

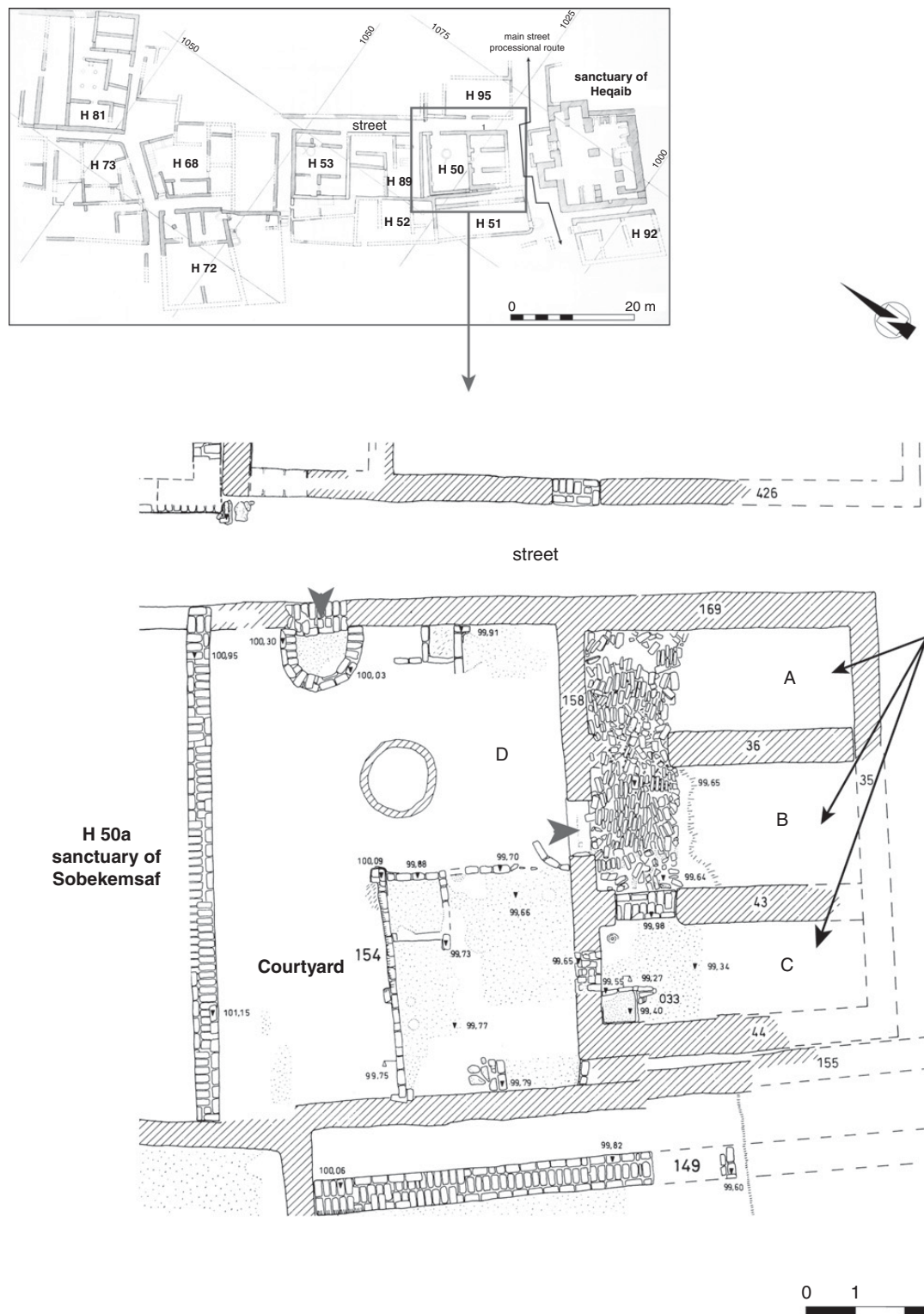
A better case for an official institution with an economic function can be made for the governor's residence (H2) on the eastern side of the island. A large late Middle Kingdom sealing deposit was found within this building, covering the deposit of older cult objects in the northwest corner,³²⁰ but also within the abandoned housing lot on the opposite side of the street, to the west of H2, where more than 600 clay sealings have been discovered (Figure 8.41).³²¹ Names of various mayors are mentioned on them, which indicates the governor's residence as the place of origin for these sealings. Three sealings found in the lot mention a khetem institution.³²² It is therefore possible that such a storage and distribution facility did exist at the town of Elephantine, but it may have been

part of the mayor's residence and not situated on the opposite site of the town, at building H84. Unfortunately, almost no architectural remains of H2 that could have provided an insight into its internal layout have been recovered during the excavations. The governor's residences known from other sites in Egypt all contained larger storage structures and magazines, and therefore it can be assumed that the case of Elephantine was no exception.³²³

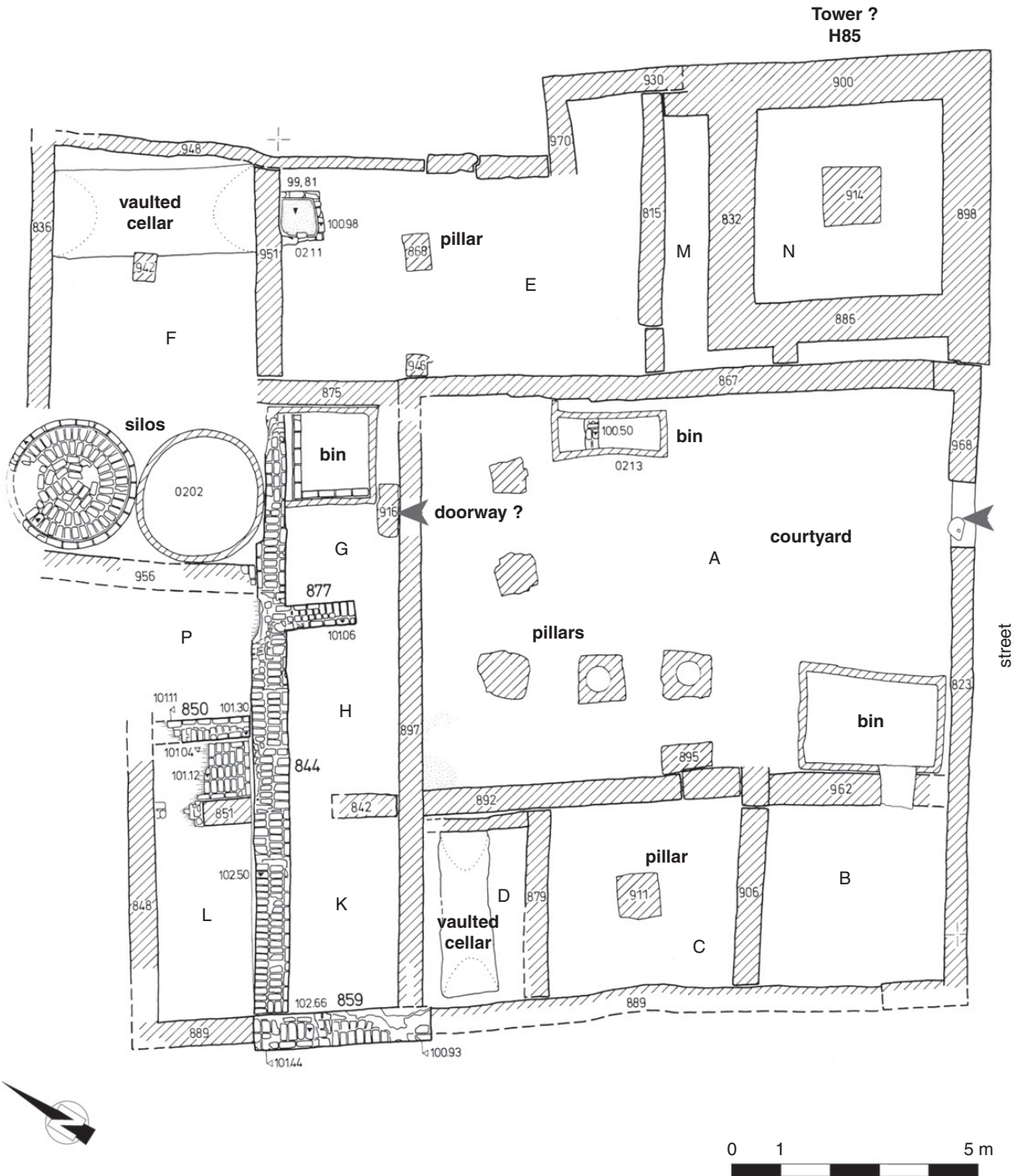
As has already been noted for the Old Kingdom, it is quite difficult to relate specific buildings to one precise activity, and in many instances there is evidence that buildings have served multiple purposes, which seems to also be true for the Middle Kingdom; the case study of Elephantine is a good example of that. There is much evidence for administrative tasks being carried out in the town, including numerous sealing deposits throughout the western settlement quarter (Figure 8.42), but it is almost impossible to link them to specific buildings, with the exception of the mayor's residence. Another question that remains to be investigated more closely is the presence of clay sealings as evidence for private economic interactions. So far, sealing activity has usually been related to official business.



8.42. Late Middle Kingdom domestic quarter at Elephantine showing distribution and size of sealing deposits (late 13th Dynasty). After von Pilgrim, *Elephantine XVIII: Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, AV 91, 1996, 256, Abb. 109. Courtesy of C. von Pilgrim.



8.43. Ka-chapel of Sobekemsaf (late 13th Dynasty) at Elephantine. After C. von Pilgrim, *Elephantine XVIII: Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, AV 91, 1996, Abb. 59. Courtesy of C. von Pilgrim.



8.44. Administrative complex H84 with storage facilities (Area B IV, Level 13, Phase b, 13th Dynasty) at Elephantine. By G. Marouard, after C. von Pilgrim, *Elephantine XVIII: Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, AV 91, 1996, 92, Abb. 26. Courtesy of C. von Pilgrim.

8.4.4 The street network at Elephantine

The principal axis through the whole settlement consisted of a 3 m-wide north-to-south street almost following the

line of the former depression between the two islands. It saw a considerable continuity in its existence, for almost 2,000 years (see Figure 8.40). It had also functioned as a

processional route, leading straight from the southern side and former gate area northward to the temple quarter. Two further streets of importance, although smaller in scale, are known for the Middle Kingdom from the archaeological evidence. In the southern part of the island, a street leading to the east and straight up to the governor's residence was found, dating back to the Old Kingdom when it was accessed through the main gate in the town wall.³²⁴ The second street leads off to the west from the main street near the Heqaib sanctuary and gave access to the Middle Kingdom residential quarter that ended close to building H84, the possible administrative building complex (see Figure 8.40).

8.4.5 The residential areas of the settlement

A block of domestic buildings has been excavated across the street from the governor's residence (Figure 8.41).³²⁵ This settlement area was termed "Häusergruppe-Süd" (H.G.S.) in the publication and is marked on the plan as the only area of the eastern island where the continuous sequence of settlement remains survived not only seabkh digging but also larger leveling operations in antiquity (Figure 8.40). As outlined previously, from the early Middle Kingdom onward, further domestic quarters evolved on the western part of the island in an area that lay to the northwest of the Heqaib sanctuary. This newly developed residential housing block was organized along the east–west street that led to the main street in the heart of the ancient town. The excavations of the domestic quarters were conducted primarily by following the stratigraphic sequences, which allow observing their evolution over time, from the early Middle Kingdom up the end of the Second Intermediate Period.³²⁶

There is no evidence for any rigorous town planning at Elephantine that can be compared with the strictly orthogonal layout of the state-planned settlements with repetitive house plans. However, some general principles of its organization that were probably related to property rights and the regulation of public spaces such as the streets can be observed. Those could have been overseen by a higher authority in charge of the settlement and the adherence to regulations concerning the use of private and public space. The individual houses were often built on roughly square or rectangular plots of land, which were surrounded by streets and alleys constituting a distinct housing block. Such a block could have contained up to six plots, each plot being used by an individual house or house unit (see Figure 8.42).³²⁷ Domestic

buildings that were part of such a housing block were always built against each other, sharing common walls. The plots were rarely of a regular shape or size, which does not give the impression that there had been much orthogonal town planning.³²⁸ Toward the street, the individual houses of a block formed a relatively uniform and well-aligned façade, including their main entrances, during the Thirteenth Dynasty (see Figure 8.42).³²⁹

8.4.6 Development of blocks and building plots in the domestic quarters

The excavations also permitted the investigation of the evolution of individual plots and entire blocks over time, which is a rare occasion for the study of settlement development in ancient Egypt. It has been possible to observe that, while there has been some continuity, numerous changes occurred, especially with regard to the size of the building plots.³³⁰

In most cases, the plots were subdivided into smaller ones but without affecting the layout of the main streets along their exterior. This indicates that not all streets were considered in the same way, and while major streets were kept free from any encroaching settlement, some of the smaller alleys could be modified or even closed off according to changes in the layout of the buildings around them.³³¹ Any expansion into what must have been considered public space is rare.³³² The most frequent division of a building plot was halving it, which might be related to hereditary family matters.³³³ In contrast, it was also possible to enlarge building plots by acquiring parts of a vacant neighboring plot; in some cases this resulted in a somewhat larger but irregular-shaped area. On rare occasions, a whole block could see a major reorganization that would have also affected the adjacent streets. In such instances, it is possible to observe that the reorganization was always preceded by a relatively long phase of abandonment, leading to the disappearance of the outer walls of the ruins.³³⁴

In some instances, there is evidence that plots remained unchanged for a considerable amount of time even if the house plans saw many internal additions and changes.³³⁵ In this respect, it is also important to note that the outer walls of mud-brick houses were often rebuilt on older wall foundations. There could be a technical reason for this, such as improved stability, but it might also be related to the fact that building plots could not easily be changed in size per se.³³⁶ This is further confirmed by the observation that there are some instances where the newly

constructed exterior walls of a building lay next to the older ones, which does not seem to have been related to any particular technical considerations.

Thus, the evolution of the residential blocks containing groups of domestic houses is characterized by frequent changes and adaptations that were often closely related to the changes in the composition and size of the individual households. Different family members not only occupied, sold, and bought plots, but also rebuilt structures and abandoned houses. These settlement quarters were probably the most dynamic areas within a settlement, resembling a living organism, but in most cases they adhered to some principles regulating the overall development of the towns and cities, of which we only know very little from written documents.

8.4.7 “Old town” center versus “new town”

The Middle Kingdom town at Elephantine is also a great case study for a comparison between the evolution of the older settlement quarters that saw continuous occupation throughout the Old Kingdom period and the newly expanding settlement areas on the former western island. In this respect, it is important to be aware that our modern perception when investigating the ancient evidence might be to some degree influenced by the European examples of medieval towns and villages that underwent major additions and expansion during the twentieth and twenty-first centuries. In the latter cases, a clear distinction can usually be drawn between the organization of the old town center in comparison with that of the new additions. This is also recognizable in a very similar way in modern Egypt, where the explosion of population numbers has led to the constant expansion of settlements in the Nile Valley.³³⁷ Orientation, size of building plots, and streetscapes can differ considerably between various parts of a town, and it would not be surprising to find such differences also in towns and cities in antiquity. However, the results of the archaeological fieldwork at Elephantine show that there was almost no difference in the size and density of buildings, plots, and entire blocks between the residential area of the older town center situated in the southeastern part of the eastern island when compared with the more recently founded settlement quarter in the northwest.³³⁸ There do not seem to be any signs of a “master-plan” in the newly founded residential quarter, which is noteworthy, especially at a time when town planning was quite dominant elsewhere. Von Pilgrim observes that from the

beginning of the foundations during the early Middle Kingdom, there was a relatively loose organization of buildings and streets that grew closer to densely settled building blocks without any signs of major official planning or interventions.³³⁹ Most importantly, one would expect that the building plots in the older part of the town would show a higher density of settlement, including the crowding of smaller house units, but no sign of this was recognizable from the archaeological record. The individual houses fall into the same size range of around 100 m², with a few smaller ones around 40 m² to 60 m², as is the case in the newly developed settlement area to the west.³⁴⁰ In addition, there seems to have been a tendency for streets to have increased in width by the end of the Middle Kingdom, which is also quite an unexpected phenomenon. For example, the northern street leading up to the mayor’s residence (H2) was 2.25 m wide and was expanded to 2.8 m–3.4 m by the end of the Middle Kingdom.³⁴¹

8.4.8 Summary and conclusions – Elephantine settlement

The ancient town at Elephantine currently provides the best overview of how a provincial town in the Middle Kingdom and the early Second Intermediate Period developed over a long interval of time. It is possible to observe how political and economic changes affected an urban settlement in the southernmost region of Egypt when central administration of the Middle Kingdom broke down, sometime during the second half of the Thirteenth Dynasty. Although there are no signs of unusual change in the domestic quarters of the town, there are several instances in which buildings of an official character seem to have been affected by the political and probably economic changes related to the breakdown in the central administration. As already noted earlier, the mayor’s residence (H2) was abandoned sometime during the Thirteenth Dynasty (Bauschicht XIII). After a long continuity in function and various phases of rebuilding of this important building complex, which has origins dating back to the Sixth Dynasty, it was finally abandoned for good. An inscription on the lower part of a seated statue depicting the temple, scribe Khnumhotep mentions a time when Elephantine was without a mayor; this has been dated to a time after the mid-Thirteenth Dynasty when the central government at Itj-Tawy had broken down.³⁴² The same text mentions that the temple had fallen into ruins. This information corroborates the

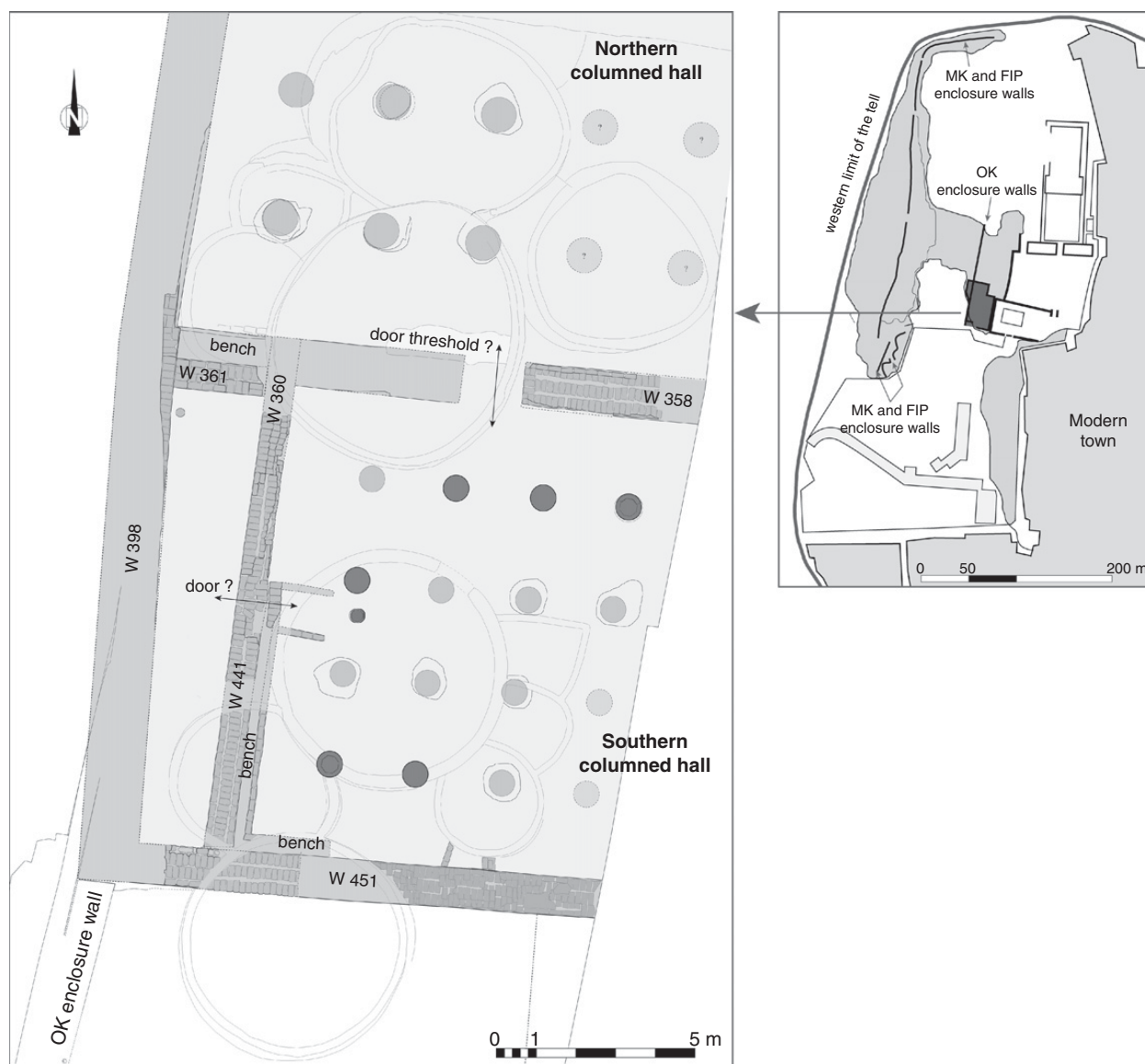
archaeological evidence rather well in connection with other official installations at Elephantine. Building H84 fell out of use at about the same time as the governor's residence, and the area was leveled and rebuilt in the late Thirteenth Dynasty. The shrine of Heqaib saw the last donations sometime during the early Seventeenth Dynasty, and it has been assumed that after the reign of King Sobekemsaf I, the sanctuary was abandoned.³⁴³ A major cultural break seems to have occurred at Elephantine during this time, which might also have been related to plundering and destruction done by raiding Nubians.³⁴⁴

8.5 TELL EDFU: THE TOWN OF THE MIDDLE KINGDOM

New evidence for a Middle Kingdom settlement has also been discovered at the site of Tell Edfu, the capital of the second Upper Egyptian province. By the Middle Kingdom, Edfu had grown into an important urban center, which extended over an area of at least 8 ha. The recent excavations by the University of Chicago Oriental Institute mission have focused on the administrative town quarter, which lies on the eastern side of the tell, close to the Ptolemaic temple enclosure wall (Figure 8.45). Remains of a large building complex have been discovered, and this complex was part of the residence of the local mayor of Edfu according to numerous clay sealings found in situ within the structure. The fieldwork only exposed parts of the complex, which is characterized by two large columned halls (Figure 8.45).³⁴⁵ The southern and western limits were identified during the excavations, but it is also evident that further rooms are currently covered by later settlement remains to the eastern and northern sides. The architecture and associated finds provide new evidence for the function and layout of a major administrative complex dating primarily to the Middle Kingdom (Dynasties 12–13). They complement the evidence for the already-discussed mayor's residence at Elephantine and also show some parallels to other administrative structures, such as the “command building” at the fortress of Buhen in Lower Nubia.³⁴⁶

The southern columned hall of this complex measures about 12 m along the north–south axis, while the extension in the east–west direction is currently to about 10 m; the remainder of the hall is still covered by several meters of settlement layers. The interior layout is characterized by a minimum of sixteen octagonal columns that were

probably made of wood and standing on top of round sandstone bases.³⁴⁷ Five of these column bases have been found in situ, but none of the columns was preserved, because all of them had been removed when the building was dismantled.³⁴⁸ To the western side, the columned hall is fronted by an elongated room measuring 2.3 m by 11.5 m. A small doorway was probably situated halfway along wall W441=W360, which linked this room to the adjacent columned hall (Figure 8.45). Such a narrow room lying adjacent to a larger hall with columns is a common feature of official building complexes.³⁴⁹ The floor of the southern columned hall consists of multiple thin layers of compacted mud that provide evidence for its regular renewal, indicating that it had been very well maintained during the lifetime of this building complex.³⁵⁰ In the final phase of occupation of this columned hall, many objects had accumulated on top of the last phase of floor renewal; this provides some information about the various activities carried out in such a structure. A large amount of pottery sherds, broken clay sealings, and other objects such as faunal remains, ceramic weights, figurines, and occasionally small pieces of pigment and polishing stones have been found that very clearly attest to the considerable variety of activities that took place here. In addition, several small fireplaces or hearths on the floor have been noted that might have served as a source of heat during the winter months. Once this hall had been abandoned, the final occupation layer was eventually covered by a layer of aeolian sand. During the 2010 season at Tell Edfu, another large columned hall was discovered to the northern side of the former one; these had been directly linked via a doorway. The excavations revealed several large holes in the mud floor of the northern columned hall that once were filled with stone column bases in a way similar to what the evidence in the southern columned hall has shown. But here none of the stone bases have been found in situ, and inside two of the holes, a fill of clean, yellow sand was noted (Figures 8.45 and 8.46). These holes were left when the bases were removed from the floor. The diameter of the holes together with the sand fill suggests that these columns had been larger and possibly heavier than those of the southern columned hall. Despite the dismantlement of these architectural elements, it has been possible to reconstruct two rows with five columns each for this hall. Its final northern and eastern limits have not yet been reached during the current fieldwork due to later settlement remains above them. The halls show an almost identical stratigraphic sequence from the period of its



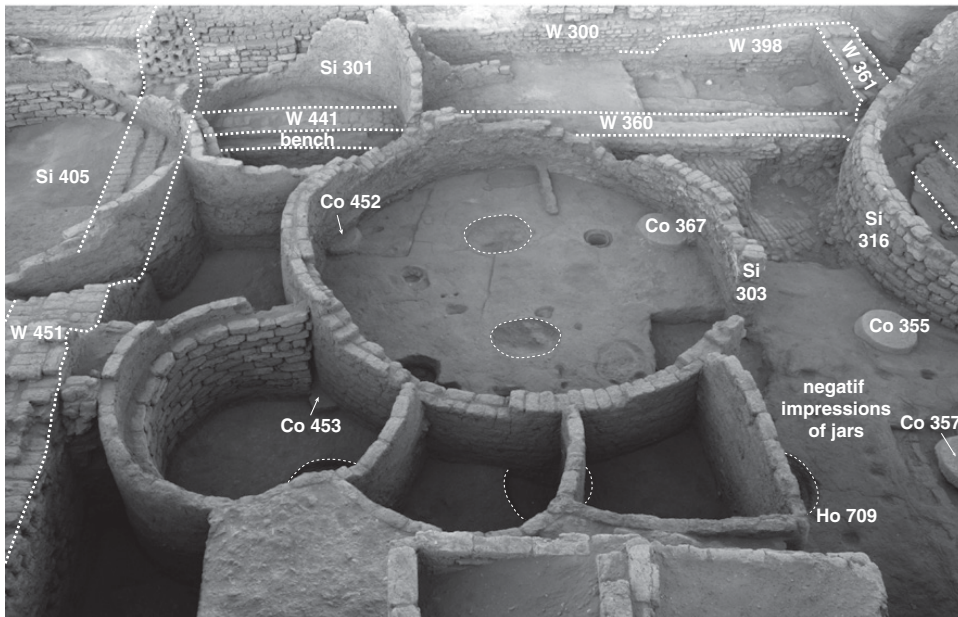
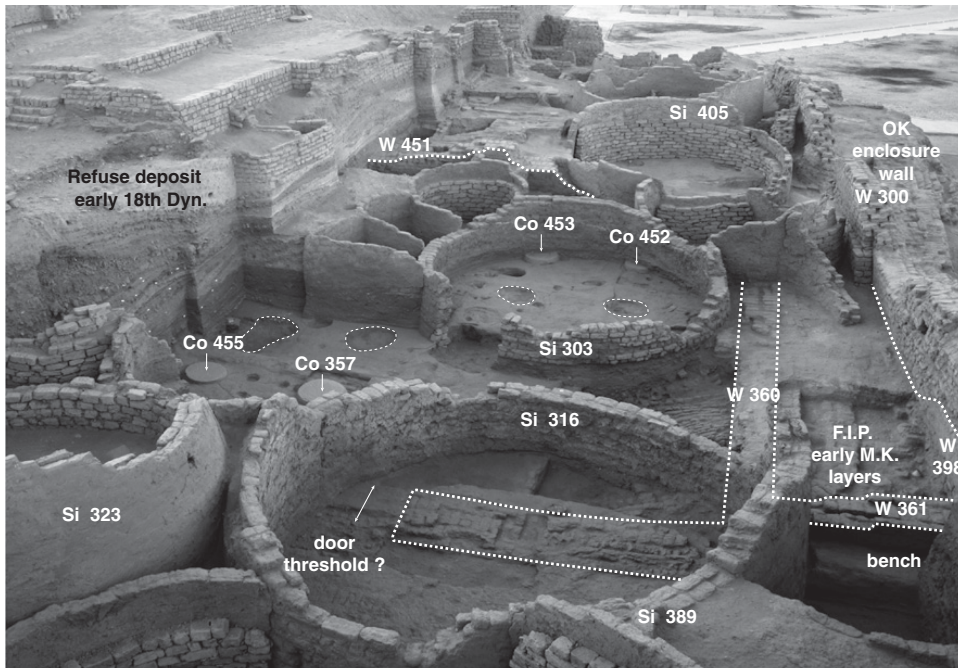
8.45. Plan of the two columned halls of the Middle Kingdom administrative building complex (mid-12th to mid-13th Dynasty) at Tell Edfu. By G. Marouard, © Tell Edfu Project 2011.

foundation up to the final abandonment, although there is some evidence that the northern columned hall had remained in use slightly longer.³⁵¹

The large quantities of broken clay sealings that were found in association with the use of these structures provide a good insight into the local administrative structure at Tell Edfu during the late Middle Kingdom, which parallels the sealing evidence elsewhere in Egypt and, for example, compares very well with the sigillographic evidence from the mayor's building at Wah-Sut in Abydos. The other finds also provide some new insight into the

activities carried out here, proving that these columned halls served multiple purposes, including small-scale manufacturing activities such as stone working. The faunal remains indicate some food consumption, which is further corroborated by several small storage jars set into the floor of the southern columned hall that could be traced by the small, shallow holes left in the ground.

This area of the ancient settlement at Tell Edfu had seen a long-term occupation of administrative structures, which can be deduced from the fact that older clay sealings and pottery dating to the First Intermediate Period



8.46. General views of the silo courtyard of the 17th Dynasty and underlying Middle Kingdom administrative building complex at Edfu. By G. Marouard, © Tell Edfu Project 2011.

and early Middle Kingdom have been found among settlement remains underneath the columned halls.³⁵² After the abandonment of the columned hall complex during the early Second Intermediate Period, the area was transformed into a granary court containing multiple large silos that held the grain reserve of the town by the Seventeenth Dynasty. Thus, this part of the town was

still used for an official institution during the entire Second Intermediate Period. The continuity of an official town quarter for more than 200 years has also been witnessed at the governor's residence and the adjacent settlement area at Elephantine, where the earliest foundations date back to the late Old Kingdom.³⁵³ Interestingly, the latter mayoral residence, which had functioned as an

important administrative center, was abandoned at about the same time as the columned hall complex at Tell Edfu, toward the end of the Thirteenth Dynasty. This could be a sign for the close connection of the governors in charge of provincial towns to the central government. The complex administrative system seems to have been much affected when the political power broke down sometime during the early Second Intermediate Period.³⁵⁴

Other elements of the town of Edfu dating to the Middle Kingdom can be found in the cemetery area, where Middle Kingdom burials were excavated by the Franco-Polish mission in the 1930s.³⁵⁵ The tombs lie partially above the Old Kingdom cemetery in the southwestern corner of the tell and are to some extent covered by the later settlement remains and waste from the town above. However, this cemetery is also a sign for much continuity in using a burial ground close by the actual settlement, even if the highest elite tombs at the time of the late Middle Kingdom might have moved to the rock formation at Hagar Edfu, at about 2 km to the west along the desert edge.³⁵⁶ One of the tombs, the burial complex of Izi, rose to much popularity during the Middle Kingdom, when it was transformed into a cult place for the posthumous veneration of this Old Kingdom governor. Similar to the case of the cult of Heqaib at Elephantine, the tomb of Izi was extended to include an open courtyard in front of his mastaba, where other officials placed statues and erected stelae addressing the deified Izi to grant them offerings for their own cults.³⁵⁷ As mentioned previously, there is no evidence for a separate state-founded sanctuary for Izi comparable to the sanctuary for Heqaib at Elephantine, and there is also no evidence for officials from outside of Edfu taking an interest in Izi's cult. This difference might be related to the fact that Elephantine was an important stopping point for officials leading expeditions traveling south to Nubia. However, only a small area of the funerary complex of Izi has ever been excavated at Edfu, because the eastern part is currently covered by 15 m of settlement debris from the ancient town.

As far as the existence of any town enclosure walls dating to the Middle Kingdom is concerned, there is good evidence for a thick wall along the northern side of the tell, where excavations of the 2012 season have focused on the cleaning of a large stretch of walls. A massive wall dating to the Middle Kingdom had been built against the exterior of the older First Intermediate Period town wall (see Figure 7.11b). The walls together reached a thickness of almost 6 m.³⁵⁸ Parts of probably the

same wall have also been found in the southern part of the site. Here another wall section lies above the Old Kingdom cemetery, adjacent to the earlier First Intermediate Period wall that had been built in a peculiar “zigzag” layout and reusing some of the mastaba superstructures in this area (Figure 7.13).³⁵⁹ As outlined earlier, this evidence also fits well with the wider phenomenon of walled cities in the Nile Valley during the Middle Kingdom, continuing the traditions of the third millennium BCE. The town walls, whether the function was defensive or to mark the official limits of a town, might have also identified these towns as regional cities in contrast to the unfortified villages and hamlets of their hinterland. While the Middle Kingdom period was not a time of internal political conflicts, and the southern border of Egypt had been extended even farther south into Lower Nubia, the following Second Intermediate Period certainly presented a need for such fortification, which can be deduced from some evidence for Nubian groups raiding in Upper Egypt. The inscription in the tomb of Sobeknakht at Elkab recounts such an attack and also mentions the ramparts of the town wall of the city of Nekheb, ancient Elkab, and the need for repairs.³⁶⁰

A last point that needs to be addressed here is the evidence for a Middle Kingdom temple at Edfu. The large Ptolemaic temple that characterizes the site of Edfu today had been built on top of earlier sanctuaries, of which almost nothing remains. It has not been possible to determine the exact location of the Pharaonic temples, which supposedly were much smaller in scale than the Ptolemaic construction. The archaeological evidence is limited to a few inscribed stone blocks that were found in secondary contexts. Two pieces of a left doorjamb showing the name of the Thirteenth Dynasty king Sobekhotep III were discovered by the Sebbakhin.³⁶¹ Excavations in the temple courtyard, conducted in 1984 by the local inspectorate under the direction of Yehia Eid, revealed several sandstone blocks inscribed with the name of a King Djehuty, who has been assigned to the early Second Intermediate Period.³⁶² These blocks included a cornerstone and two pieces of an architrave of monumental size, but no further information as to the exact nature of this structure can be deduced from these few finds. Inscriptional evidence points to a temple building that was constructed under the reign of Senwosret I of the Twelfth Dynasty.³⁶³ Even though there is little archaeological evidence for the temple dedicated to the town god Horus during the Middle Kingdom, it is evident that such a structure existed during that time.³⁶⁴

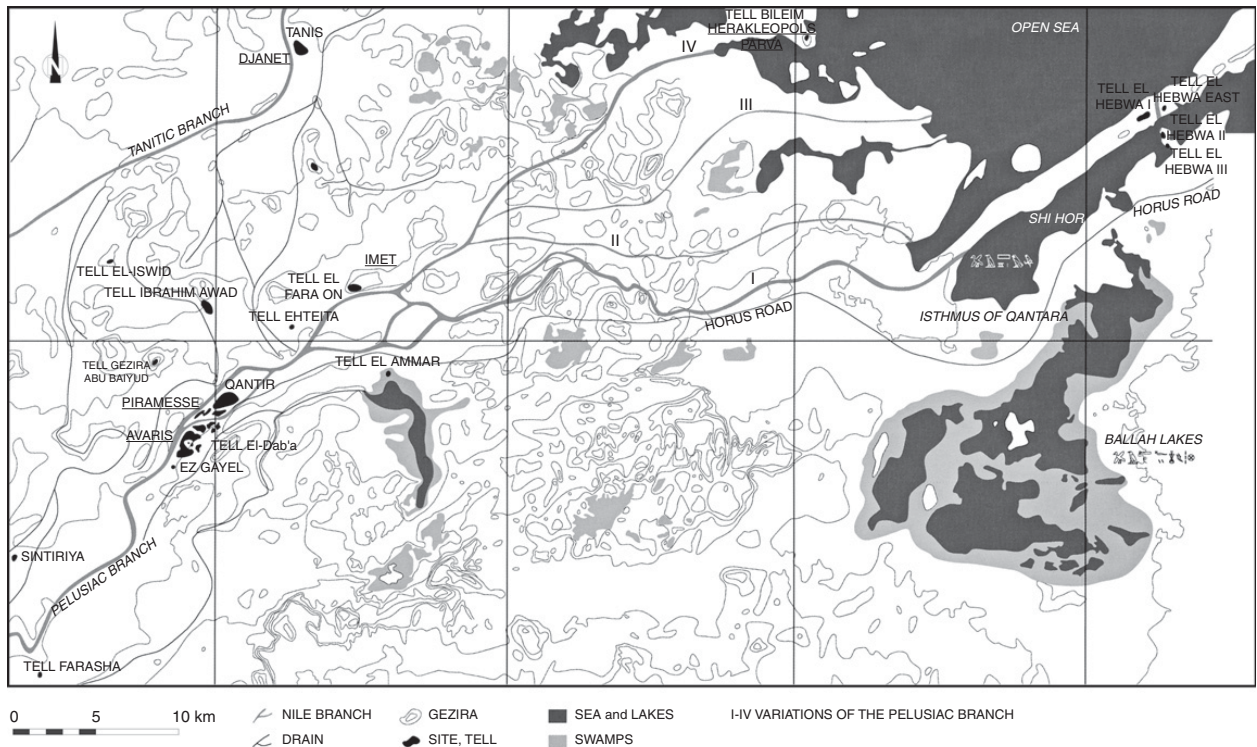
Up to the present time, there is no evidence for the location of residential quarters at Edfu, but it is very likely that they once stood to the west of the administrative quarter. The almost-vertical cuts along the sides of the tell left by the sebakh diggers reveal a westward evolution of the ancient settlement during this time that is also indicated by the location of the Middle Kingdom town wall. However, most of this area is currently covered by several meters of later occupation phases and remains and therefore is inaccessible for further exploration.

Although less archaeological data is available from Edfu in comparison with the town of Elephantine, there can be no doubt that the ancient capital of the second Upper Egyptian province once formed a dynamic urban center during the Middle Kingdom and into the Second Intermediate Period. Various important elements – such as the recently excavated elaborate administrative complex and the town walls, as well as the presence of a socially stratified society with a local elite, attested by the rich corpus of funerary stelae from this site – in addition to the large sealing corpus providing evidence for connections to the central government leave no doubt about its status.

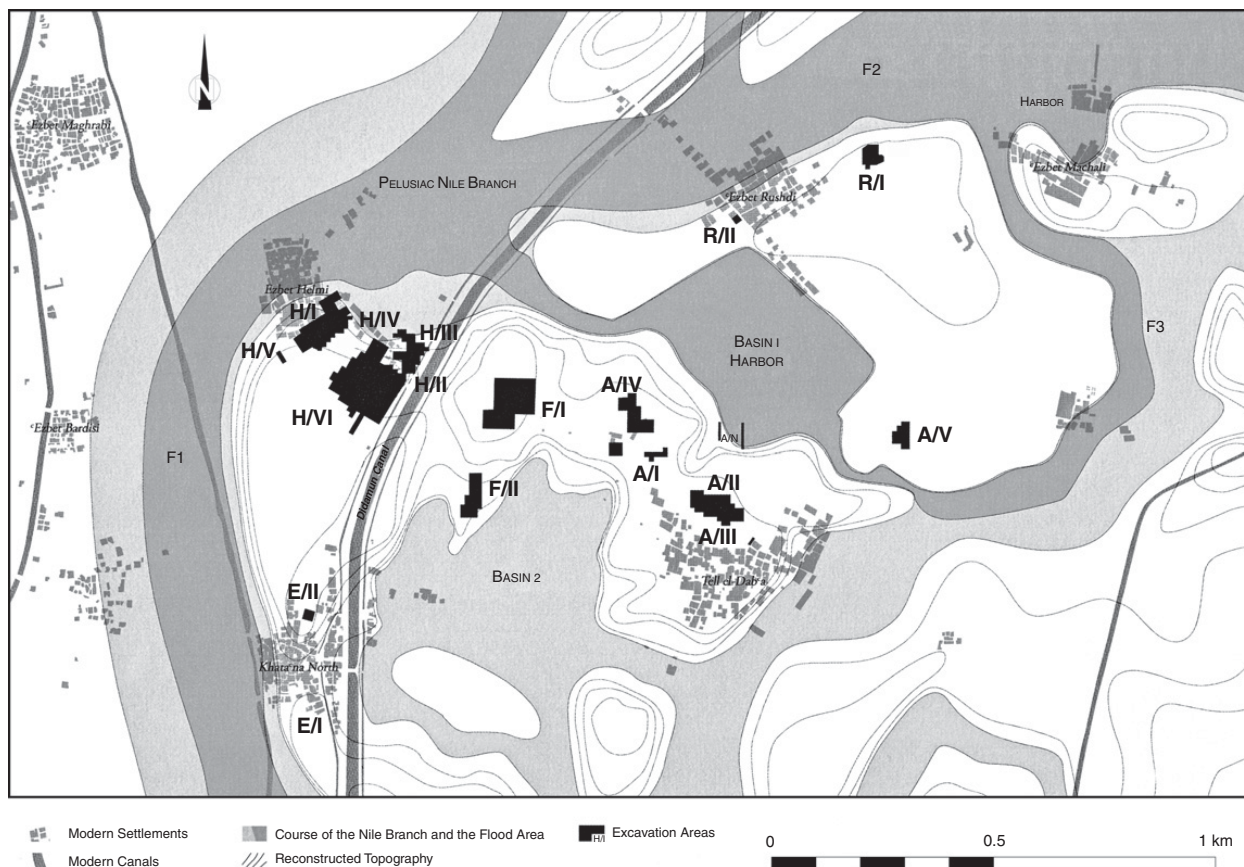
8.6 TELL EL-DAB'A: THE EVOLUTION OF A MAJOR URBAN CENTER IN THE EASTERN DELTA REGION

The site of Tell el-Dab'a, ancient Avaris, situated in the eastern Nile Delta (Figure 8.47), has been the focus of archaeological fieldwork for more than forty years by the Austrian Archaeological Institute, first under the direction of Manfred Bietak and of Irene Forstner-Müller since 2011. The site covers a large area of more than 165 ha and is nowadays quite well understood in terms of the ancient topography and settlement patterns because a large-scale geophysical survey has been carried out at the site in addition to excavations in selected areas. The excavations have focused on separate zones of the site, often not directly connected (see Figure 8.48). Therefore, each zone has its own stratigraphic sequence, which has been correlated with those of the other areas for establishing the general chronological development of Tell el-Dab'a (see Table 8.2).³⁶⁵

The specific topography at Tell el-Dab'a had a great impact on the development of this settlement and played a role in the first foundations at the site during the early



8.47. Site of Tell el-Dab'a within the eastern Delta region. After M. Bietak, "Houses, Palaces and Development of Social Structure in Avaris," in M. Bietak et al. (eds.), *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 27, fig. 1. © M. Bietak.



8.48. Plan of Tell el-Dab'a showing the different excavation areas and harbors. After M. Bietak, "Houses, Palaces and Development of Social Structure in Avaris," in M. Bietak et al. (eds.) *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 32, fig. 6. © M. Bietak.

Middle Kingdom. As outlined earlier, the beginning of settlement at Tell el-Dab'a is characterized by the state-planned foundation in area F/I, which falls into the category of nonurban settlements founded by the state. It was laid out according to an orthogonal grid system with repeated modules of house units and has been interpreted as an effort toward "colonizing" a hitherto unsettled area in the eastern Delta.³⁶⁶ It is evident that the advantages of the local topography had been taken into account when this site was chosen for settlement. To the west lies the Pelusiac Nile branch, which opened into a natural harbor basin (Basin 1), creating several "islands" and peninsulas that were used for settlement (Figure 8.48). Further to the east lay a large drainage system consisting of several swamps and lakes that offered additional protection (Figure 8.47).³⁶⁷ In the following periods and continuing well into the New Kingdom, the site of Tell el-Dab'a played a major role in trade relations with the eastern Mediterranean regions and the Levant, having easy access to the coast and also being situated on

the land route to the southern Canaanite region. It is evident that it was more than a simple harbor for river traffic because it offered a major stopping point for incoming and outgoing ships and boats from and to the sea. During the Hyksos period (Dynasty 15), a second basin (Basin 2) seems to have existed further south, in close proximity to the palatial complex situated in area F/II (see Figure 8.48).³⁶⁸ In the New Kingdom period, these harbors might have housed the Egyptian naval base called Perunefer, which had played an important part in Egypt's military campaigns into the Syro-Palestinian region.³⁶⁹

The settlement of the Middle Kingdom continued, after a short hiatus at the site, with a second state-founded settlement built further to the northeast at the site of Ezbet Rushdi (Figure 8.48).³⁷⁰ This site also followed an orthogonal layout and contained uniform house units with large courtyard areas. The primary occupation of its inhabitants seems also to be related to agricultural activities. By the late Twelfth Dynasty, parts of this settlement

TABLE 8.2. Manfred Bietak's Chronology of Tell el-Dab'a (2011)

MB-PHASES	B.C.	EGYPT RELATIVE CHRONOLOGY	TELLEL-DAB'A						GENERAL STRATIGRAPHY
			TOWN CENTER (Middle Kingdom) 'Ezbet Rushdi	NEW CENTER MB-Population	PALACE DISTRICT	EASTERN TOWN	NORTHEASTERN TOWN	PALACE DISTRICT 'Ezbet Helmi	
			R/I	F/I	F/II	A/I-IV	A/V	H/I-VI	
LB I	1410	Dyn. XVIII	H I A T U S						Amenophis II
	1440	III							C/2
	1470	II							C/3
	1500	TI							D/1
MB III (MB II C)	1530	AI	D E N U D E D						Thera Pumice
	1560	III							Paintings
	1590	II							e/1
	1620	AI							Almose
MB II (MB II B)	1650	HYKSOS	D E N U D E D						DATUM LINE ± 1530 BC
	1680	III							D/2
	1710	II							D/3
	1740	AI							D/4
MB I/II (MB II A-B)	1770	KINGDOM OF AWARIS NEHESI	D E N U D E D						Khayan
	1800	III							E/1
	1830	II							E/2
	1860	AI							E/3
MB I (MB II A)	1890	XIII	D E N U D E D						F
	1920	II							G
	1950	AI							G/4
	1980	III							H
EB IV (MB I)	2000	XI	U N O C C U P I E D						I
	2030	II							K
	2060	AI							L
	2090	III							M
	2120	II	H I A T U S						N/1
	2150	AI							N/2-3
	2180	III							
	2210	II							

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were built over by a small temple under the reign of Senwosret III,³⁷¹ which then lay at the heart of a town covering an area of around 7.5 ha.³⁷² The recent geophysical survey in this area revealed the presence of an even larger settlement in orthogonal layout and covering almost 30 ha.³⁷³ These remains are good evidence for a considerable investment by the state in settling larger communities at Tell el-Dab'a that seem to have been primarily involved in agricultural activities.³⁷⁴ No evidence points to major construction work or any large-scale foreign trade at that time. The presence of the small temple by the second half of the Twelfth Dynasty at Ezbet Rushdi indicates the intention to permanently establish a larger town here, probably of urban character. However, there is not currently enough data that allows for any further precision on this point.

8.6.1 The development of residential quarters during the late Middle Kingdom

By the late Twelfth Dynasty, a new element appeared at Tell el-Dab'a that had certain consequences for the

overall development of the settlement patterns. A group of foreign settlers of Syro-Palestinian origin began to inhabit parts of the southern area of the site. The earliest traces of foreigners have been found in area F/I; they started to settle here after the hiatus following the early Middle Kingdom settlement (Figure 9.5, phase d/2). A curious mix of Egyptian elements and Middle Bronze Age culture can be recognized from the finds and buildings remains. The house layouts resemble those of a Palestinian-style building, with a large rectangular hall in the center (Figure 9.5).³⁷⁵ At Tell el-Dab'a, these houses were surrounded by a walled courtyard and provide the impression of a rather loosely organized settlement. To the south of the settlement, a larger cemetery developed. The tombs contained Egyptian grave goods but also axes, spears, and daggers of Syro-Palestinian origin. In addition, over 20 percent of the pottery found at the site belongs to this Near Eastern-Middle Bronze Age tradition.³⁷⁶ Some of the tombs had been built directly against the exterior of the perimeter walls of the individual house complexes, which is another non-Egyptian custom.³⁷⁷

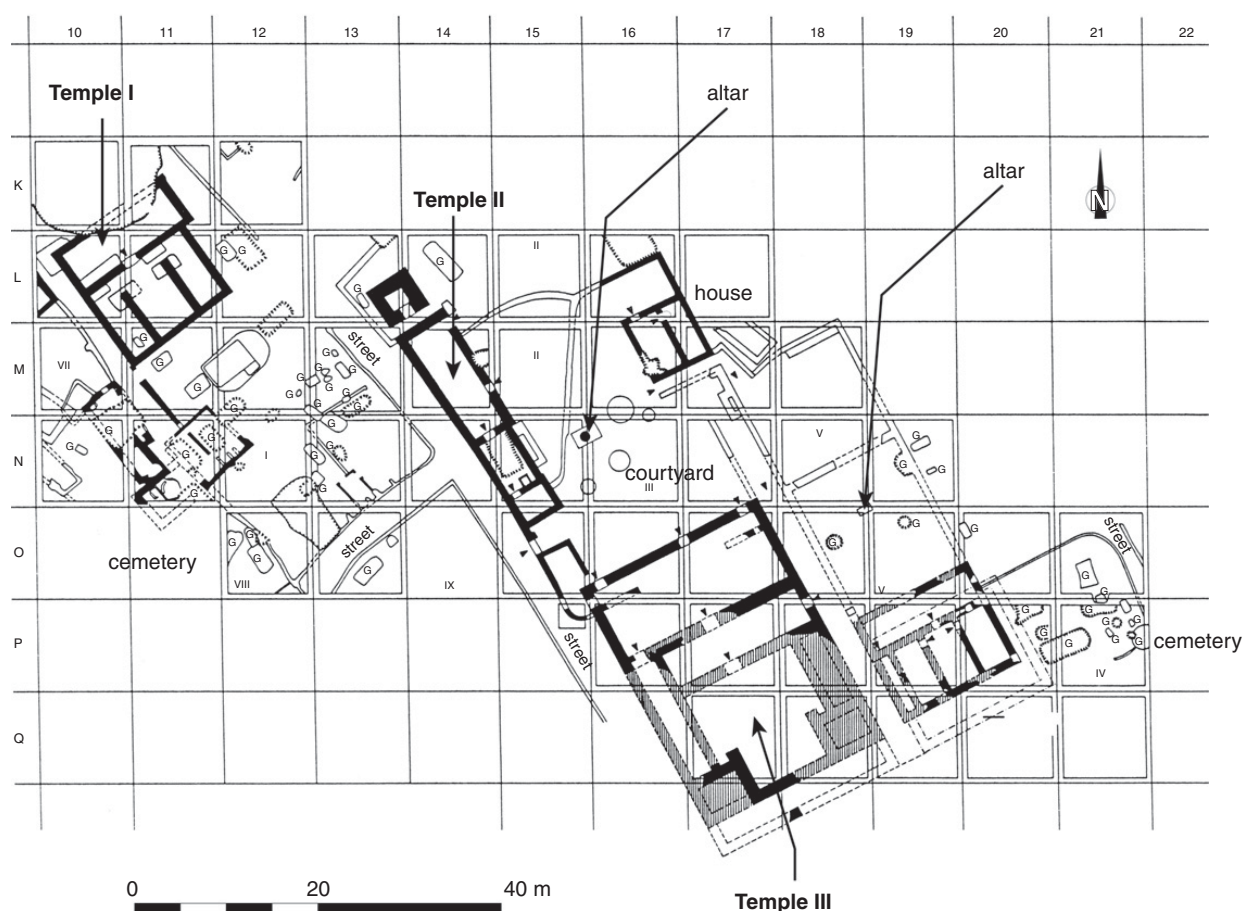
The following occupation phase in area F/I, which dates to the Thirteenth Dynasty (Figure 9.10, phase d/1), is characterized by a large palatial complex that replaced the smaller houses of the older settlement phase.³⁷⁸ It is interesting to note that the architecture of the new complex is almost entirely Egyptian in style, with close parallels, for example, to the core unit of the elite mansions at Lahun but on a larger scale and with slightly different proportions (Figure 9.10).³⁷⁹ However, there is enough evidence to deduce that the occupants were not Egyptians, but rather belong to an elite of Syro-Palestinian origin. This palatial complex might have served as the administrative center of the town. It saw several phases of enlargement and had a garden area attached to its southern side, which was transformed into an elite cemetery over time. No inscriptional evidence has been found at the palace that could provide any precise information as to the inhabitants. Probably the best source concerning its occupants comes from the adjacent cemetery to the south. Six tombs consisting of small, vaulted, mud-brick chapels have been excavated here and were arranged in a single row (Figure 9.10). Although these tombs had been severely disturbed, some information about the owners could be retrieved. They seem to have been high officials in charge of trade between Egypt and the southern Levant and the eastern Mediterranean.³⁸⁰ This observation can be further confirmed by the large variety of objects found in these tombs, including Minoan Kamares ware, Canaanite storage jars, and jewelry of probably Aegean origin. In several instances, foreign-style weapons have been found too.³⁸¹ Whereas the architecture of the tombs is Egyptian in style, the animal burials containing donkeys and sheep/goats attached to the front of these tombs certainly were not.³⁸² The occupation of this palatial complex seems to have ended very suddenly and was followed by a short period of abandonment in this area (see Table 8.2, “hiatus”).

Later on, above the ruins of the abandoned palace complex, much simpler mud-brick buildings were erected, often consisting of two only rooms (Figure 9.6, stratum G/1–3). Bietak has interpreted this settlement phase – characterized by small, two-room houses surrounded by much space and rather loosely organized (Figure 9.6) – as a kind of “egalitarian settlement” pattern.³⁸³ In area A/II, the same kind of settlement was found during this period, which suggests that the town had spread over a considerable area, covering more than 75 ha by the advanced Thirteenth Dynasty

(see Figure 9.7a and b).³⁸⁴ During phases F and E/3, there is much evidence for an increase in social complexity and overall settlement density in area F/I at Tell el-Dab’a (Figure 9.8).³⁸⁵ The newly built houses are now completely Egyptian in style, and the larger ones resemble the typical layout encountered at Lahun, with distinct core units of three rooms fronted by a vestibule.³⁸⁶ The only discernable “foreign” element is the frequent addition of tombs against the exterior of the house walls, usually next to the room that has been designated as “bedroom” according to the presence of a bed niche toward its rear (Figure 9.8).³⁸⁷ The inhabitants occupying this settlement had obviously assimilated many Egyptian cultural traits such as the architecture of their houses but can still be recognized as foreigners in relation to the ceramic evidence. The presence of this multicultural society is also recognizable by the marked increase in foreign pottery on site, which at this point had reached about 40 percent of the total assemblage. There are also first signs of locally produced vessels in Middle Bronze Age IIB style among the imported pottery. Over time and continuing into the early Second Intermediate Period, these residential areas saw a growing trend of evolving into larger and more complex houses as well as being increasingly densely settled. By phase E/2 of the early Second Intermediate Period, individual buildings cover between 300 m² and 450 m² (Figure 9.9). However, the percentage of foreign pottery on site declines to 10 percent, which might be a sign for the acculturation process of the inhabitants, in which they increasingly adopted Egyptian cultural traits.

8.6.2 The temple quarter of the late Middle Kingdom

A temple precinct at Tell el-Dab’a has been discovered in area A/II, situated in the southern part of the site (Figure 8.49). By the early Thirteenth Dynasty (Table 8.2, stratum F), a large cemetery had developed surrounding several temples and cult buildings. It is again possible to discern Egyptian and Middle Bronze Age traditions amongst the various temple buildings. The largest temple (III) is a typical Middle Bronze Age structure that has a length of about 30 m. Its interior is characterized by several rectangular courts leading into the inner part of the sanctuary, of which only a very few wall fragments have been preserved, precluding a precise reconstruction of its layout (Figure 8.49).³⁸⁸ The temple forecourt contained an altar surrounded



8.49. Late Middle Kingdom temple precinct and cemeteries (late 13th Dynasty?) in area A/II at Tell el-Dab'a. After M. Bietak, *Avaris, the Capital of the Hyksos: Recent Excavations at Tell el-Dab'a*, 1996, fig. 30. © M. Bietak.

by trees as well as offering pits; these features provide good evidence for non-Egyptian cultic traditions. The offering pits contained large amounts of charred faunal remains and pottery vessels – predominantly vessels for food consumption.³⁸⁹ On the western side of the forecourt, another temple building (temple II) of Near Eastern tradition has been discovered (Figure 8.49).³⁹⁰ However, in the same precinct, two Egyptian-style cult buildings (temples I and IV) were found as well. They consist of a rectangular court or hall that provides access into a tripartite sanctuary toward the back (Figure 8.49). The Egyptian cult buildings might have functioned as mortuary chapels linked to the funerary cult.³⁹¹ This settlement quarter clearly formed a separate ritual zone closely linked to the tombs situated in discrete precincts next to the cult buildings (Figure 8.49).

8.6.3 Discussion about the urban character of Tell el-Dab'a during the Middle Kingdom/early Second Intermediate Period

As outlined earlier, the excavations at the ancient town of Avaris provide an excellent opportunity to analyze the development of a large regional center within the eastern Nile Delta. So far, Avaris is the only site in this region that has offered substantial remains dating to the first half of the second millennium BCE. At other known tell sites, evidence for any Middle Kingdom occupation has been difficult to come by. No traces have been reported, for example, from the site of Mendes in the central Delta,³⁹² and there is equally a marked hiatus in the occupation at Buto.³⁹³ An important Middle Kingdom town seems to have existed at Bubastis/Tell Basta in the southeastern Delta, where an elite cemetery and governor's residence

have been discovered.³⁹⁴ However, there has been some skepticism as to whether Tell el-Dab'a can be regarded as a representative example of an Egyptian urban settlement because of the multicultural character of its population. A large influx of foreign settlers inhabited much of this town from the late Middle Kingdom onward and brought some of their own cultural traditions with them. Nevertheless, it is possible to agree with Bietak that there are many Egyptian characteristics present – especially in terms of house layouts – that permit the consideration of this site as a model for urban development in the Delta.³⁹⁵ The foreign cultural features and the interesting mix of Middle Bronze Age culture and typical Egyptian features are especially prominent in the funerary evidence. What is unknown so far, and might never be fully grasped, is whether there were any Egyptians living side by side with the foreign settlers or whether it was a town entirely inhabited by a population that immigrated from somewhere in Palestine.³⁹⁶ The beginnings of settlement at Tell el-Dab'a are evidently Egyptian, as can be seen by the two large state-planned settlements excavated in the areas of F/I and Ezbet Rushdi. However, by the late Twelfth Dynasty, there is not a single burial or building that did not exhibit some foreign elements in addition to Egyptian features, which makes it unlikely that any Egyptians were among the inhabitants. Close contact between these two cultures evidently existed, as is witnessed by the majority of Egyptian pottery present and the few inscriptions found at the site. In addition, there is evidence that the Egyptian administrative system was largely adopted by the Canaanite settlers – seen in the sealings and the use of the Egyptian writing system. It can be argued that the immigrants were to some extent integrated into the wider Egyptian administrative system, which can be deduced from the use of scarab seals and typically Egyptian administrative titles for some of the highest elite members.³⁹⁷ The principal reason for this integration might have been linked to their involvement in large-scale trading activities as important middlemen within the wider trade network of the eastern Mediterranean and the Levant. This can be witnessed by the large amount of imported objects from different regions such as Crete, Cyprus, and the northern and southern Levant – of which a representative selection has been found in the burials as grave goods.³⁹⁸ It is very likely that the settlement of foreigners in the Delta was much welcomed by the Egyptians during the late Middle Kingdom, as they facilitated the acquisition of luxury items for the rest of the country. It is possible that Tell el-Dab'a functioned as a

kind of trading center, comparable to the later Greek emporion at Naukratis, and acted as a hub for many different kinds of commodities and luxury items that were then sent farther south to the royal capital and to important urban centers within the Nile Valley.

As far as the layout of the city can be reconstructed, there is no doubt that it exhibits urban features such as large residential areas, which especially during the Thirteenth Dynasty and the early Second Intermediate Period show a clear increase in social complexity. This can be witnessed by the layout and size of the houses, in addition to a higher density of inhabitants probably linked to a growth in the overall population numbers. By this time, the foreign settlers were well familiar with the layout of Egyptian domestic architecture and, interestingly, adopted the type of the Lahun house as their model.³⁹⁹ A certain degree of social hierarchy is also evident in the palatial complex that was built during the early Thirteenth Dynasty in area F/I, which was completely modeled on an Egyptian elite-style building. The inhabitants must have been much exposed to Egyptian culture and especially elite culture to adopt this trend – one that in Egypt is known not only for the large mansions at Lahun but also occurs at the governor's residence at Wah-Sut in Abydos. Whether this kind of building layout also reflects a regional style remains to be seen. The governor's palace at Bubastis does not show any layout comparable to that of the palace complex at Tell el-Dab'a (Figure 9.11),⁴⁰⁰ and this kind of architectural style has also not been found either at Elephantine or at Tell Edfu, two sites situated much farther south in Upper Egypt.

Another urban characteristic at Tell el-Dab'a is the temple precinct in area A/II, which contained the main temples as well as cemeteries of the ancient town. Some of the urban features absent at Tell el-Dab'a are any enclosure walls. The large spread of the site over 75 ha by the late Middle Kingdom and the natural protection of lagoons and swamps on the eastern side and the river, including the harbor basins, to the western and northern sides might have made any further protective measures obsolete. The nature of the excavation as it stands at the moment does not permit distinguishing any specific street network in the town that would allow for the recognition of main streets or processional ways.⁴⁰¹ The unusually large size of this settlement, which undeniably had urban features, is much related to the given local topography and landscape features, which were less restrictive in comparison with those of the Nile Valley and permitted a spreading out over a wide area.

8.7 CONCLUDING REMARKS

The obvious bias in our sources toward state-planned settlements, against which only four sites of “organically” developed towns can be presented, is noteworthy. This situation is to some extent related to the fact that the former were single-period settlement sites located mainly along the desert edge in contrast to the tell sites in the Nile Valley with complex stratigraphy and superimposed remains, such as those of Elephantine and Tell Edfu. With the exception of Tell el-Dab’a, where settlement spread over a large area that did not form a compact tell site in any fashion similar to sites in Upper Egypt, it is much more difficult to get a precise idea of the overall size and layout of these towns during the Middle Kingdom. The four cases of Elephantine, Tell Edfu, Karnak, and Tell el-Dab’a, which have been presented here in more depth than other sites, show urban characteristics and can be considered representative examples of what urban towns in the Nile Valley and Delta would have comprised. Except for Tell el-Dab’a, all of these sites were enclosed by a town wall and contained at least one temple dedicated to the local town god, frequently in conjunction with additional sanctuaries. Closer contact between these provincial urban centers and the central government can be noted, for example, in increased temple-building activity and royal donations to the local sanctuaries in the form of pious foundations. It also served to improve the economic network of the country. In Upper Egypt, the development of the posthumous veneration of local elite figures, for which evidence has been found at both Edfu and Elephantine, is striking. At the latter site, this even evolved into a cult of national importance. The existence of administrative structures can be discerned from the sealing evidence in addition to the remains of large buildings used by the highest-ranking official of the town, the local mayor, which is another important indication of the settlements’ urban status. A close link with the royal court is usually explicitly expressed by the highest elite members of the town, who stress any such connection in their tomb biographies or through official titles.⁴⁰²

Cemeteries for the elite were most often located in rock tombs; suitable cliffs were not always present in the immediate surroundings but could also be located at a distance to the related town. This is the case for Elephantine at Qubbet el-Hawa, which is situated 1.5 km to the north of the island, and for the necropolis of Hagar Edfu, which is related to the townsite of Tell

Edfu but also lies at a distance – of about 2 km to the west – to the latter. In similar fashion, the Theban necropolis on the Nile’s West Bank served as the elite cemetery *per se* for the city of Thebes at Karnak. In addition to the tombs of the highest elite, there are smaller cemeteries probably belonging to the midlevel officials and their families, who constructed simpler mastaba tombs closer to the settlements, such as has been noted on the western part of the Elephantine island and along the southwestern corner of Tell Edfu.

Tell el-Dab’a is in several ways an exceptional site – with regard to its local geography but also in view of the constant influx of foreign settlers, who brought a certain amount of their own cultural traditions with them, a fact that becomes very visible in the mortuary culture at the site.⁴⁰³ Cemeteries seem to have spread very close to the settlement, sometimes immediately adjacent to residential quarters, which also contained tombs attached to the individual houses. However, the urban character of Tell el-Dab’a is undeniable.

For none of these sites have the major production areas been located yet, and in some cases – such as Elephantine and Tell Edfu as well as Karnak – it is likely that they are still buried beneath later remains along the margins of the townsites. The residential quarters at Elephantine and Tell el-Dab’a show differences in the house layouts and size of building plots, which is to be expected due to the varying topographic parameters and geographic locations. In addition, some regional differences should be detectable that are probably most visible in relation to the plans of individual buildings (see [Section 9.7](#)). Completely missing is any evidence for villages in the Nile Valley and Delta, which is comparable to the situation during the Old Kingdom.

As far as state-planned settlements are concerned, several types can be recognized, depending on the different purpose and functions of these planned settlements. The sites excavated at Tell el-Dab’a and Qasr el-Sagha do not fall into the category of urban sites, which is mainly related to the lacking hierarchy and diversity among buildings. At Tell el-Dab’a, the two planned sites also show a remarkable repetition of the same building units, possibly an indication for a relatively homogenous social group occupying these settlements.⁴⁰⁴ However, the site of Qasr el-Sagha did contain some elements that are usually associated with urban settlement, such as a temple and a cemetery in the vicinity, in addition to the manufacturing area at the Eastern Settlement. Nevertheless, the layout of the Western Settlement does not qualify as

urban. There are only uniform barrack-style buildings, which makes even a permanent settlement here questionable; there is no hierarchy among any of these barracks, and they also do not resemble in layout the domestic structures from any other site. They also stand in much contrast to the larger and more complex sites of Lahun and Wah-Sut. Despite its planned layout, there is no reason to dismiss an urban character for Lahun, which functioned as an important townsite for a considerable amount of time. The strict orthogonal layout indicates the presence of more socially diverse inhabitants, which is also confirmed from the textual sources. Lahun was enclosed by a wall, had its own temple, and also had administrative areas, including the residence of the mayor, which most likely was the building on top of the acropolis. As outlined in this chapter, the mortuary element was a later addition and remained clearly separated from the rest of the town by a thick wall. Among other indications, this strongly suggests that Lahun had not been intended from the outset as a “pyramid town” or mortuary foundation. However, this was the case for the settlement at Wah-Sut located at South Abydos, which despite showing many similarities in layout and size to Lahun, has some significant differences. There is no evidence for an enclosure wall or a temple dedicated to a town god. Building A is the largest and most prominent building at the site and has been identified as the mayor’s residence functioning as the main seat of administration at Wah-Sut. From the clay sealings found here, it is clear that this town operated within the same administrative system as Lahun and other urban centers in the Nile Valley. A large production area was discovered between the mortuary temple of Senwosret III and the townsite. Wah-Sut clearly had the role of a pyramid town, with the main purpose of its foundation being linked to this task, a role that continued into the early New Kingdom when Ahmose, first king of the Eighteenth Dynasty, constructed his mortuary complex to the south in this region.⁴⁰⁵ Although it is possible to argue for Lahun being urban simply on the basis of the various elements that also existed in the urban settlements of the floodplain, including its foundation that predates the establishment of the royal mortuary temple, it is more difficult to assign Wah-Sut to a more specific category along these terms. The size and complexity of the buildings, in addition to the remarkable hierarchy of the inhabitants, certainly would suggest an urban character as well. These examples also prove that there is rarely a clear-cut line between what should qualify as

urban and what should not when dealing with state foundations, because they comprise a very special group of settlements.

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Further discussions and archaeological details relating to Chapter 8

8.1 THE FUNCTION OF SINUSOIDAL MUD-BRICK WALLS DATING TO THE MIDDLE KINGDOM

The phenomenon of sinusoidal walls in the archaeological record deserves some discussion concerning the function and purpose of such walls as well as their archaeological context. They seem to be typical for the Middle Kingdom and have been found at a large number of sites.

Remnants of a sinusoidal wall have been excavated underneath the street level along the interior of the mud-brick enclosure wall at Qasr el-Sagha (Figure 8.16).¹ Joachim Śliwa hypothesizes that there might be a link between this wall and the foundation ritual for this settlement.² Sinusoidal walls that follow an undulating course and are often only one mud brick thick have been discovered at many Middle Kingdom sites, ranging from settlements (for example, Qasr el-Sagha;³ Tell el-Dab'a, area RII, stratum e/1–4 (Figure 8.9);⁴ and area F/I, stratum d/1 and G/1–3⁵) to royal mortuary complexes (for example, at Abydos: Senwosret III tomb;⁶ at the Theban West Bank: unfinished tomb of an early Dynasty 12 ruler, perhaps Amenemhat I⁷) and nonroyal cemeteries (for example, at Tell el-Dab'a, area F/I, phase H).⁸ This is just a small selection of examples from a much larger corpus that, however, demonstrates quite well that they occur at a wide variety of sites and regions in Egypt. These walls appear at unfinished building projects and within domestic courtyards or within cemeteries, which in itself does not support a ritual purpose but suggests a foremost practical function for this type of wall. For example, the sinusoidal wall remains excavated at the Western Settlement of Qasr el-Sagha show that the wall belongs to the construction

stages of the settlement and was later deliberately dismantled and covered by the street next to the enclosure wall.⁹ In contrast to the published drawing of the sinusoidal wall, the photographs from this site show the presence of mud mortar between the individual bricks (Figure 8.16). This sinusoidal wall was deliberately dismantled when it fell out of use, probably coinciding with the erection of the mud-brick enclosure wall around the settlement. This is good evidence for its temporary character, and it might have been a measure to keep the building site sand free.¹⁰ Joe Wegner, in his investigation of the unfinished tomb complex of Senwosret III at Abydos, has come to a similar conclusion regarding these sinusoidal walls. Here they appeared in different parts of the site within the enclosed superstructure of the royal tomb.¹¹ Wegner provides an in-depth discussion of their functions and convincingly argues that these walls were used primarily as screen walls and sand protection, especially at construction sites. The other examples that have been discovered at the planned settlement of Tell el-Dab'a at Ezbet Rushdi indicate a private use for these walls as dividers of a large open courtyard, which included multiple round granaries. It might have been a measure by the various households who shared a common courtyard to mark their activity areas and storage installations. Another example of a sinusoidal wall has recently been excavated at Tell Edfu, where it appeared in a thick ash fill that had been deposited against the interior face of the northern town enclosure wall. In this case, the sinusoidal wall had been used to retain the ash deposit. These examples demonstrate very well that any religious connotation or link to foundation rituals is not very plausible. They were simply an efficient way to erect temporary screen walls.

8.II THE PURPOSE OF THE SETTLEMENTS AT QASR EL-SAGHA AND THE FUNCTION OF THE STONE-REVELTED MOUNDS

Another problematic issue that needs to be discussed with regard to the two settlements at Qasr el-Sagha is the frequent description of the archaeological remains as evidence for an urban development, which can be found in numerous publications.¹² It is important to emphasize that neither settlement shows any attributes of being urban, nor were they fortified by a defensive wall.¹³ On the eastern side of the Western Settlement, a stone-revetted sand dune has been noted that has been interpreted as a measure of protection against waves when the water level of the lake would have been much closer to the settlement and the temple.¹⁴ Similarly, another stone-covered mound lies to the south of the Eastern Settlement, in a north-south alignment (Figure 8.11). It has been proposed that these mounds are part of the fortification system of the two settlements, although this is certainly not a satisfying explanation for the one to the south of the Eastern Settlement, which is not even close to or aligned with the site (see Figure 8.11). These two stone-revetted sand dunes are not the only examples in the area. As early as during the fieldwork conducted by Dieter and Dorothea Arnold, several man-made stone revetments covering larger mounds and sand dunes were noted, especially in the area southwest of the temple close to the so-called quay structure (Figure 8.19 a–d).¹⁵ Their precise function has been discussed in several publications, and the interpretations range from a fortification system, to protection against the waters of the lake, to quay points for mooring and loading boats, to lookout posts.¹⁶ During an extensive survey in the northern Fayum region, Jim Harrell observed several additional characteristics about these revetted mounds that are important for a better understanding of the purpose of these features. In total about seven hillocks – not all of them with a stone revetment – have been recorded in the Qasr el-Sagha area south of the temple.¹⁷ The stone revetments themselves consist mainly of loosely arranged stone blocks, including many basalt fragments but also other stones (Figure 8.18b). The tops of these mounds frequently show man-made depressions or trenches in the center. This led Harrell to believe that they might have served as lookout points, while the stone revetment prevented sand erosion caused by the strong winds in this region.¹⁸ He convincingly argues against any interpretations related to defensive purposes, the shipping of basalt,

or protection from the lake waters. It is also clear that not all of them are contemporary: the revetted mound next to the Western Settlement could not have been earlier than the Middle Kingdom because it is covering some of the mud-brick walls of the settlement, and a Second Intermediate Period date has been proposed for it (Figure 8.18a, b).¹⁹ In contrast, some of the mounds, such as the large L-shaped one farther south, contained some Old Kingdom pottery on its surface and might have dated earlier (Figure 8.18c).²⁰ The differences in date are also indicated by the variations in appearance: examples with a revetted surface but no trench on top are found closer to the temple, whereas some of the hillocks near the quay do not have a revetment but clearly show the trenches. In view of this rather complex data set relating to these sand mounds, I would strongly argue along with Harrell's conclusions that they must have been linked to minimizing erosion and blowing sand. The revetments and trenches found in association with the sand mounds are very likely a measure to consolidate sand erosion and stabilize dune movement in this region due to strong winds.²¹

8.III FURTHER ARCHAEOLOGICAL DETAILS DISCOVERED AT THE SETTLEMENT OF LAHUN

8.III.1 Enclosure walls and main gates

A town wall with a thickness of 3.25 m enclosed the whole settlement at Lahun. This enclosure was excavated along the northern, western, and eastern sides, but the southern section of the wall had disappeared due to heavy erosion of the settlement remains in this area.²² An additional enclosure wall of comparable dimensions runs north to south along the west side of the acropolis and divides the settlement into two distinct areas: a larger eastern one of almost square shape and a thinner, elongated part on the west (see Figure 8.20).

Along the exterior face of the northern town wall, a slight slope can be seen that varies between 6 and 9 degrees, while the interior was straight; the mud bricks used for its construction were of a large size, measuring 20–21 cm × 41 cm × 13–14 cm.²³ After a closer investigation by Ludwig Borchardt and later by the Canadian mission, it is now evident that the town wall was erected in at least two phases and does not constitute just one building project. The first phase is marked by an enclosure wall that follows an almost-square outline, with the

dividing north–south wall having functioned as the original western enclosure, while the second phase saw the addition of a settlement area to the west, also enclosed by a wall. The original western wall thus became a dividing wall within the settlement proper. There is now much evidence that proves that the first phase existed for a considerable amount of time before the western extension was added, which has serious consequences for our understanding of the evolution of Lahun (see [Section 8.2.4](#)).

The detailed investigation of the northwestern corner of the original enclosure wall showed a cornerstone, which had been used to protect and stabilize this important angle. The corner was made of two limestone blocks – a larger one placed directly on the foundations and a thinner one on top ([Figure 8.21](#)). This observation proves that the continuation of the enclosure wall to the west was an extension, because it is not bonded to the older wall with the cornerstone but simply leans against it.²⁴ The extension of the second enclosure wall was built directly against the corner and lengthened the whole town wall to the west. The mud bricks used for both the original enclosure and the extension are almost identical in size, as recorded by Borchardt. He also noted two principal modules for mud bricks at Lahun: a large-size module of 20–21 cm × 41 cm × 13–14 cm and a smaller one, which measures 16–17 cm × 33–34 cm × 11 cm. The larger format was used for most of the walls on the site and confirms the preplanned nature of the constructions according to some kind of master plan. The smaller modules were usually found in contexts where the inhabitants had made additions to their buildings and belong to a later stage in the settlement's history.²⁵

Borchardt also noted in his sketches a secondary brick layer along the base of the entire northern enclosure wall, including the extension, which was constructed against the base of the wall with a slope reaching only about 90 cm to 100 cm in height.²⁶ This was a measure to repair and protect the base of the enclosure from any wind erosion. It was made using the smaller brick module, which clearly indicates that it was a later addition. The Canadian expedition also reported this secondary brick lining along the base of the northern town enclosure wall, which they were able to follow to the northwestern corner of the older wall phase.²⁷ They investigated some of the brick lining in more detail at one of the small staircases along the outside of Mansion 2 and found that the lining was made on a fill layer covering

the stairs ([Figure 8.27](#), enclosure wall restoration). In addition, they also found more evidence for this brick lining along the north–south enclosure west of the acropolis, which belongs to the older phase of the settlement.²⁸ Without any further details, dates, and more-precise drawings, it seems quite possible that the brick lining also belongs to two phases: a first one around the original settlement and a second one along the western extension. No details as to their date have been published so far, and a continuation of this inquiry should ideally be part of any future fieldwork at the site.

Further investigations and a test trench along the exterior face of the north–south enclosure wall that currently divides the town into two parts have revealed traces of another thick wall abutting the enclosure. It was built on more than 70 cm of settlement debris and is therefore clearly a later addition, the date of which remains unknown.²⁹ The mud bricks that were used for this secondary wall are of the same size as those of the original enclosure wall. However, the test trench also showed that this wall was 3 m thick, indicating that it was not a simple repair measure but an addition or reinforcement of this enclosure at a later point in the settlement's history. It was followed for more than 35 m along the exterior of the western dividing wall. So far no information as to the stratigraphic relationship of this wall and the mud-brick houses of the Western Settlement portion has been published; on Petrie's plan, the houses in this area are abutting the north–south dividing wall. Hopefully, work will be continued here sometime in the near future in order to clarify these building sequences.

8.III.2 Exterior staircases along the northern town enclosure

During the reinvestigation of the northern town enclosure wall, several mud-brick staircases were discovered that had been built against the exterior face of the enclosure. In each case, they were located just behind the granary facilities of the northern row of mansions. Three such staircases have been found linked to Mansions 1, 2, and 4. Each of them was constructed with a slightly different layout, confirming them as secondary additions made by the inhabitants of the mansions for practical purposes such as filling the granaries.³⁰ All three staircases were later dismantled, and this development does not allow for any precise reconstruction about how the granaries would have been accessed from above. Only the lower mud-brick courses of the stairs

have survived (Figure 8.27). The fieldwork by the Canadian mission also revealed the carefully plastered walls of the granary belonging to Mansion 1 and noted some barley on the ground.³¹ The preserved four steps of its external staircase still reach an elevation of about 60 cm and were built with the standard large mud-brick module common at the site.³² When the stairs fell out of use, the upper part was dismantled and then covered by a thick fill layer. Onto this layer, the thin mud-brick wall (38 cm wide) made of much smaller bricks was built that protected the lower part of the enclosure and was noted to have survived in several areas along the northern side (see Figures 8.26 and 8.27).³³ This certainly indicates that the external staircases were quite a bit earlier than the mud-brick restoration against the exterior face of the northern enclosure.³⁴ It also suggests that the exterior ground level might have risen to a higher elevation when this thinner protective brick wall was added. An exact date for the latter has not yet been established.

The second staircase remains were found next to the granary of Mansion 2. Here the form of the stairs is quite different, consisting of two staircases leading up to the top from the eastern and western sides, in a sort of “pyramidal” shape.³⁵ Interestingly, a full reconstruction of this double staircase would only lead to a height of 1.28 m. Could this indicate that the enclosure wall must have been quite low in this part, where the granaries lay? Traces of a prepared mud floor were found around the staircase. No signs for the secondary protective wall lining of the enclosure were found here. The third location where traces of stairs have been detected is situated along the exterior façade of Mansion 4, again located next to the much-destroyed granaries. Only three steps of this staircase are preserved, but it seems to have also been a double staircase such as the one found at Mansion 2.³⁶

8.III.3 The street leading up to the main town gate

During the excavations by the Canadian mission, fieldwork was concentrated in the area in front of the main gate of the settlement, which Petrie identified along the northeastern side of the eastern section of the enclosure wall (Figure 8.23).³⁷ The gate lies in the axis of the main east–west street of the town. Petrie had already noticed two mud-brick walls flanking the exterior of the gate and abutting the enclosure wall at a right angle. The reinvestigation of these features revealed that each wall has a thickness of about 0.7 m, and they continued farther to the east and flanked the main

access leading up to the gateway (see Figure 8.23). It has been possible to follow this construction for a length of about 27.5 m to the east. This exterior street lined by the two walls was 2.5 m wide; it lies in the direct axis of the gate and the main street inside the settlement. At about 5.6 m from the gate to the east, a distinct break was observed in both sidewalls, providing discrete openings to the north and south sides. These openings are about 1.7 m wide and are linked to two to three steps that gave access to the northern and southern exteriors of the mud-brick enclosure wall at Lahun (Figure 8.23).³⁸

Although no evidence for any major production zones were found along the exterior of the settlement, the Canadian mission noted traces of domestic activities in several areas that they had investigated during their fieldwork at the site. Near the two openings with the stairs leading to the northern and southern sides of the exterior of the town enclosure, remains of mud plaster and pottery sherds have been found. The bedrock showed signs of having been leveled. Similarly, stratified deposits were noted along the northern exterior of the town wall – in some cases at a distance of up to 5 m north from the enclosure.³⁹ These deposits could certainly confirm that even though no large-scale industrial production zones seem to have been present, the settlement did not exist in isolation to its surroundings. The areas along the exterior of the enclosure could have been used to keep animals or to carry out any kind of other temporary household and domestic activities – probably comparable to those often noted within towns in unoccupied, open areas such as abandoned building plots.

8.III.4 The “acropolis”

The natural bedrock at the site of Lahun is made of limestone and seems to have received much preparation by the early town builders in order to create a level surface. In the northern part of the settlement, an elevated stone outcrop marks a site that was also cut into shape but keeps its elevation of 5 m to 6 m above the ground level of the adjacent buildings, marking it as the highest point of the town. Petrie only found a few traces of mud-brick walls on top of this elevated outcrop, which he included in his plan. The two thick mud-brick walls bordering the “acropolis” – as Petrie named this structure – on its eastern and western sides were founded on the lower ground level and rose up to a height of probably more than 10 m, serving as the exterior walls of the building that was constructed on

top of the limestone outcrop.⁴⁰ The building complex designated “acropolis” measures 57.9 m by 39.7 m, corresponding to the size of the other mansions at the site. Its eastern wall, which was also the main dividing wall to Mansion 1, was founded on the same height as the floor level of Mansion 1 and has a thickness of 3 m. It was well preserved and provides some insight into its construction technique, characterized by several layers of reed matting between the bricks.⁴¹ From the entrance room, two staircases were accessible – one to west and one to the north (Figure 8.24). No trace of a third staircase that was indicated on Petrie’s plan has been found during the recent fieldwork. The mud floor of the entrance room is characterized by at least eight phases of successive floor layers covering the mud-brick pavement, which indicates the regular renewal of this floor.⁴²

The Canadian team was able to make many additions to Petrie’s records concerning the structure on top of the acropolis. They paid much attention to archaeological details such as the so-called mud pats, which are thick round patches of mud mortar used to keep the bricks of the walls together and also as the foundation for the first layers of bricks on the floor levels.⁴³ The internal organization of the acropolis resembles quite closely the layout of the other mansions in the northern row (Figure 8.24). The central set of rooms considered the “master suite,” with a four-columned “reception” room at its center and fronted by a long transverse corridor, gave access to the courtyard on the northern side, and a few traces of the typical columned portico in front of the court have been found. To the western side of the master suite, a square peristyle court with a central water tank that had been set into the floor has been recorded. To the south of this feature, another group of rooms was entered, of which one was identified as a bedroom according to the protruding half pillars in the wall forming an alcove at the southern end.⁴⁴ To the east of the central courtyard, five rooms were noted that are of almost identical size and are also missing from Petrie’s plan (Figure 8.24). These resemble magazines, and the eastern half of each chamber is characterized by a deep cut into the bedrock down to the floor level of the adjacent Mansion 1. They were probably used as cellars for storage and would have been covered by a wooden trap door.⁴⁵

The acropolis saw at least two major changes and alterations to its original plan that especially concerned the northwest corner of the building where secondary wall additions and two vertically cut shafts of unknown function have been found along the center of the

northern wall of the courtyard and along the interior of the northern enclosure wall. In Christian times, this area had been used as a cemetery.

8.III.5 The open area south of the acropolis

South of the acropolis, access was given to a now seemingly open area without any discernable mud-brick remains apart from a few wall fragments in the southern half (Figure 8.25). The whole precinct stretches 52 m in a north–south direction and roughly 32.8 m in an east–west direction.⁴⁶ Remains of mud-brick paving were found on the bedrock in several areas in the northern half of the empty space, especially close to its northern and western boundary walls. This pavement was followed for about 10.5 m in a north–south direction, which led the excavators to believe that this part of the area had indeed functioned as an open courtyard. However, from the published plan, this only affects less than a quarter of the total length, and it is entirely possible that more building remains once stood in the now-open area, which seems to be still covered by much sand (?) due to an old Decauville railway (?).⁴⁷

The wall remains in the southern half were reinvestigated by the Canadian mission, which was able to provide a new reconstruction for its layout (Figure 8.25).⁴⁸ The first room of the building consists of a hypostyle hall with two rows of columns, of which two mud-brick circles have been found in the remains of the mud-brick pavement on the southern side, indicating the former presence of column bases. The full stretch of this room in a north–south direction is difficult to reconstruct because its northern end is missing; a small piece of the northwest corner has been tentatively marked on the plan, and this would allow for two rows of six columns each (Figure 8.25). Access to the building was gained from the western side, which is interesting, as there are only a few meters between the entrance and the western enclosure wall. With the open space to the north, if it had been open indeed, it would have been easy to create a layout based on a north–south axis, like that of almost all the buildings at Lahun.⁴⁹ Behind the hypostyle hall to the east, a series of elongated rooms can be seen. Two thin rooms orientated in a north–south direction were at the heart of the structure and accessible via a broad room in the front.⁵⁰ It is possible that this building had once functioned as the temple dedicated to the town god of Lahun, possibly Sopdu, Lord of the East (see Section 8.2.4).

8.IV FURTHER ARCHAEOLOGICAL DETAILS NOTED AT THE SETTLEMENT OF WAH-SUT AT SOUTH ABYDOS

The recently excavated Middle Kingdom settlement site situated at South Abydos has many parallels to Lahun. It functioned as part of a royal mortuary complex consisting of a tomb and the temple for Senwosret III. It closely resembles Lahun in its preplanned orthogonal layout with similarly repeated house units. Interestingly, one building of primary importance can be easily recognized from the published plans of the site. Building A has been identified as the mayor's residence according to numerous clay sealings found here. Much of the northern half of the site, which borders the floodplain, is lost today because of modern agriculture and villages, while the southern half is quite well preserved.

8.IV.1 Transformations in Buildings A and C

The mayor's residence saw substantial transformations over time to its internal layout. These changes provide important information about the constant evolution and alterations undertaken by the occupants. The information, in turn, demonstrates that the mayor's residence was much more than just a residential unit and had important economic and administrative functions too. Major alterations specifically affected the areas of the columned portico and the large courtyard, which are just south of the main residential unit (see [Figure 8.31](#)). In its original form, a hall with a single row of fourteen columns lay in front of the nine-room residential unit, stretching over 38 m in length. Against this columned hall, on a lower level, was the so-called lower court, which is one of the principal features of Building A, occupying about a third of the entire building complex. The southern side of the lower court was characterized by a portico of eight columns that fronted the columned hall on its northern side before leading into the open space of the courtyard.⁵¹ Within a couple of decades, major changes were carried out in this area in order to install several storage facilities as well as an additional housing complex, Building C, which seems to have had a residential function ([Figure 8.31](#)).

The first measure of alterations affected the eight columns of the portico and must have happened quite early in the history of occupation of Building A.⁵² The wooden columns were taken down, and several small rooms and mud-brick compartments were created in this space.

A white residue of organic origin suggests that some of these bins and smaller rooms were used for flour processing and storage ([Figure 8.31](#)).⁵³ A couple of more substantially built rooms to the western side might have functioned for administrative purposes, probably linked to the management of the flour production and storage. Some of the rooms showed evidence for painted wall plaster, and one of the rooms of the western room group had a long mud-brick bench built against its northern wall. This flour storage and processing facility was located close to the granary block on the western side of the courtyard and had been accessible from the residential core unit of Building A through the columned hall. It is possible that the dismantling of this flour facility later on, sometime during the Thirteenth Dynasty, was linked to the transformation of the granary block into a residential quarter for Princess Reniseneb.⁵⁴

The next phase of occupation saw a considerable change in the layout of this whole area – including parts of the lower courtyard – marked by the creation of a terrace in front of the columned hall that was made of a mud-brick fill and then paved over with bricks, creating a larger, elevated area.⁵⁵ In order to achieve a stable terrace, a new retaining wall at a distance of 10.5 m from the façade of the core unit was added to the southern side to support this terrace, which now formed a kind of upper court on the same level as and accessible from the columned hall.⁵⁶ Against the northern side of this retaining wall, an entirely new building was erected on the level of the lower court, Building C. According to the ceramics evidence, it was possible to establish the precise date for its construction, which dates to the Thirteenth Dynasty.⁵⁷ Building C now occupies the western side of the lower courtyard and was separated from the round granaries on the court's eastern side (see [Figure 8.31](#)) by a long, sloping north–south corridor. This corridor also provided direct access from the north toward the central part of Building A.⁵⁸ The granaries consists of a minimum of three round silos of medium size, with a diameter of about 3.2 m each.⁵⁹ Building C has been interpreted as a domestic unit, probably accessed from the eastern side, through a columned hall that originally consisted of six columns, of which only the column base negatives were preserved. The hall is linked via an east–west corridor to several rooms in the center of the building ([Figure 8.31](#)).⁶⁰ One of the rooms has been identified as a kitchen according to much burnt debris and numerous bread trays. The double-roomed chamber in the center of Building C was equipped with a long mud-brick bench

along its southern side. The finds and architecture suggest that this was an additional residence that could have been used by one of the family members, suggesting that by that time the inhabitants might have become a large extended family.⁶¹

8.IV.2 From the granary to the princess quarters

Another event of major alterations was noted in connection with the ten-unit granary complex along the western side of Building A, which had a similar layout to the granary blocks at Lahun (Figure 8.31). Dated by pottery evidence to the mid-late Thirteenth Dynasty, this granary complex was transformed into a small residence. Rooms of the first group on the southern side were equipped with benches along their sides, and one of them had a sunken storage compartment. These rooms could be entered directly via a corridor from the western side of the central residence of Building A.⁶² From there the inner part of the remodeled complex was accessible, marked by a portico with two square pillars that led into a seven-room residential unit (Figure 8.31).⁶³ Further rooms to the north of this residential unit were less well preserved and might have functioned as a kitchen and food preparation area according to the presence of large amounts of ash. To the east, several doorways provided access to the central courtyard area, which in its north-western corner saw the addition of a small formal garden with several lines of tree pits organized in three rows of four trees each. Pieces of fig roots were recovered from the tree pits. Along the southern end of the courtyard, several thin mud-brick walls forming small bins and the traces of dung indicate that animals had been kept here.⁶⁴

According to the concentration of about fifty-nine clay sealings that were found in this remodeled granary complex, it has been possible to identify the occupant of this residence, which is a very unique circumstance. The clay sealings mention the name and titles of the noblewoman and king's daughter called Reniseneb.⁶⁵

8.V FURTHER ARCHAEOLOGICAL DETAILS OF THE MIDDLE KINGDOM SETTLEMENT AT ELEPHANTINE

8.V.1 Storage building H84

One of the few buildings that has been identified as an administrative complex at Elephantine is situated along the northwestern margins of the settlement, close to the

remains of the small step pyramid of the Third Dynasty (Figure 8.40). Cornelius von Pilgrim characterizes this structure as a supply institution, which he identified as an archaeological example of a *khetem*, a name that is known principally from administrative documents.⁶⁶ Because of its special nature, H84 deserves a more in-depth presentation of the archaeological data, which contributes to a better understanding of any discussion regarding its use and function within the wider settlement of Elephantine.

Building H84 belongs to phase (Bauschicht) 13, which dates to the late Twelfth up to the mid-Thirteenth Dynasty. Its state of preservation has been quite problematic because of the earlier French excavations in this area, but also due to the constant rebuilding and larger leveling operations during phase (Bauschicht) 12, dating to the late Thirteenth Dynasty. This has, for example, caused the complete removal and destruction of any layers that can be associated with the use of H84 for most of its eastern portion.⁶⁷ The uncovered building sequence indicates that H84 functioned for about fifty to seventy years, and three main phases of use can be distinguished (a–c).

Building H84 was constructed following an almost-square plan and covers a total area of about 316 m², making it one of the largest structures in this town quarter. Its internal layout is characterized by a large open courtyard (A), which was directly entered from the street on the eastern side. The entrance had probably been equipped with a stone threshold, although no traces except for the pivot socket remain. At the street, a stone pavement has been found that seems to only extend in front of the entrance to H84 (Figure 8.44).

At least five columns once stood along the southern and western side of the courtyard, giving it a kind of peristyle appearance, with parts of it roofed (Figure 8.44). Although the columns were dismantled in antiquity, their former presence can be witnessed by two preserved stone column bases that stood on square mud-brick foundations along the southern side. Of the others, only the brick foundations remain. The courtyard had also been equipped with two rectangular storage installations or bins (Figure 8.44).⁶⁸ The rectangular storage bin along the western wall had been sunk more than a meter into the ground; when excavated, its fill was found to contain much household waste such as pottery and animal bones but also numerous broken clay sealings.⁶⁹ This deposit has been linked to activities of administrative nature that were carried out here – such as the opening of sealed commodities.

The relatively bad preservation of this whole building has made any clear identification of doorways to the surrounding rooms difficult. To the south lay a group of three rooms (B–D) that presumably were once accessible from the courtyard, but due to the bad preservation of the archaeological remains, it has not been possible to precisely determine where these doorways were. Room D was equipped with another cellar construction – one that spanned the entire length of the room and was covered by a mud-brick vault (Figure 8.44). The vault leans against a thin wall built along the northeastern wall of room D, while the entrance to the cellar was on its opposite side. This excludes the possibility that room D had been directly accessible from the courtyard. The doorway could have been in connection to room C or from its western side. Room C is characterized by a single square-brick foundation in its center that was probably also used as a base for a column (see Figure 8.44). Considering the bin construction in the southeastern corner of the court, the most likely access from the court into the rooms along the southern side was via room C, unless the bin was a later addition.⁷⁰ The two rooms to the north (E and F) were also equipped with square pillar foundations for columns supporting the roof. The eastern side of the wall separating room E from room F showed signs of burning, suggesting the presence of a fireplace or oven in this northwestern corner of room E. Room F was equipped with a vaulted cellar spanning the whole width of the room in its northeastern half (see Figure 8.44). Its opening was on the eastern side, through room E. On the floor of the vaulted cellar, a thick layer of barley was discovered, indicating that it had been used for the storage of grain.⁷¹

Over time, building H84 was extended to the west, and it is quite likely that rooms G, H, K, and L were part of this extension instead of belonging to a separate building, but the archaeological evidence is too badly preserved in order to draw a firm conclusion.⁷² As mentioned earlier, this part of the excavation area was also much disturbed by later buildings and older excavations, so a clear stratigraphic analysis and link to the remainder of H84 is extremely difficult. There are some indications of a doorway along the northern half of the courtyard wall leading into rooms G and H that was later blocked (see Figure 8.44). In the oldest phase of H84 (c), room G was equipped with a small round silo of approximately 2.5 m in diameter, and a second one of similar dimensions was added later.⁷³

A complete sequence of superimposed floor levels was found in the northeastern part of room F, showing a considerable sequence of at least ten separate layers.

As mentioned previously, building H84 consists of three phases that saw internal changes and adjustments, especially of the rooms along the western side (G, H, and K; see Figure 8.44). In phase b, a new north–south wall was added that became the new exterior wall of H84.⁷⁴ In the last building phase (a), the western rooms were changed again, as well as the northern rooms E and F. Most of the earlier storage facilities had been replaced by others of similar types. These three building phases show clearly the continuity in function of this building, as all three phases are characterized by the presence of various types of storage installations. These installations within the rooms around the courtyard leave only a few of the rooms free for any other household activities, but no conclusive evidence for H84 having been either of domestic and/or of entirely official character has been found. As the evidence stands now, it is plausible to argue for a building that might have been used for some administrative activities and as a short-term storage facility, but it could, at the same time, have been used for domestic purposes. When compared with the older settlement phase (Bauschicht) 14, the presence of storage bins within the courtyard can already be seen in the archaeological record, but at that time a domestic building stood here.⁷⁵

The northeastern corner of H84 was occupied by a separate structure that has been given a different number, H85, because its relation to the former is not quite clear (Figure 8.44). From an architectural point of view, it is a separate building unit, but its precise link to H84 remains obscure because the stratigraphic record between the two has been largely destroyed. The layer of a mud floor that leaned against the exterior eastern wall (M898) of H85 was followed along the eastern street and under the stone pavement in front of the main entrance of H84 (Figure 8.44). This provides the only evidence that these buildings were functioning at the same time.⁷⁶ The architecture of H85 is striking and does not resemble any known building type. It is of square layout, with 1 m thick and well-built mud-brick walls that are much wider than the external walls of H84, for example. The inner room space covers only an area of about 15 m², which is very small.⁷⁷ A square brick pillar marks the center. According to this evidence, the excavator suggested that it might have been a kind of tower with multiple floors and a staircase, but the evidence is not entirely

conclusive.⁷⁸ In the interior space (N), but also in the thin corridor (M) surrounding H85, the largest deposit of clay sealings (more than 1,200 pieces) was found, but again the archaeological context makes it hard to directly relate it to either H84 or H85.⁷⁹

As discussed in this chapter, there are too many unknown factors in relation to both buildings H84 and H85, which makes any identification as to their purpose difficult and unreliable. The identification as an example of a khetem institution cannot be confirmed from the archaeological data or from the sealing evidence.

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House Layouts in the Middle Kingdom

9.1 INTRODUCTION

The study of domestic house layouts of the Middle Kingdom has in the past principally focused on three particular sites: Lahun, Tell el-Dab'a, and the New Kingdom city of Tell el-Amarna.¹

Especially for Amarna, a wealth of data is available from the archaeological evidence, but also from the pictorial record that is present in the local elite tombs, which makes it a perfect case study into ancient Egyptian domestic architecture and layouts on a more general level.² Similarly, the large mansions at Lahun have been the focus of many architectural studies, and the more recent excavations at Tell el-Dab'a have contributed new evidence as well. Earlier periods and other sites are much less well presented and analyzed, studies of their features often hindered by the absence of sufficient data that would allow for a wider comparative study. Therefore, in the few cases in which an analysis of domestic houses has been attempted, comparative material for the Middle Kingdom has been drawn from New Kingdom and Old Kingdom sites in addition to the Middle Kingdom evidence.³ To what extent this methodology can be problematic is obvious especially when covering a wide time frame and different regions such as the Nile Delta and Upper Egypt. In addition, in many cases, some of the buildings that were used for comparison can only tentatively be identified as domestic buildings. Numerous examples from Old Kingdom royal mortuary complexes have often served as comparative material even though they might have constituted only temporary dwellings for priests and support staff, lacking the presence of entire families. In such cases, the layout and room functions might not reflect the organization of typical houses used for residential purposes that were occupied by families on

a long-term basis. Another frequently cited group of "houses" consists of structures from the interior of the Middle Kingdom fortresses in Lower Nubia, but the precise purpose and function of these room groups is questionable and therefore these cannot be considered reliable examples of typical domestic buildings.⁴ Some of these rooms might have been used for administrative tasks and storage, as can be witnessed by the amount of discarded clay sealings found inside them, and their occupation was probably of a temporary nature by members of the rotating garrisons. There is little evidence before the end of the Middle Kingdom/early Second Intermediate Period for the presence of entire families being stationed at these forts on a more permanent basis.⁵ These examples demonstrate quite well that too many unknown factors are involved in relation to settlement at the Nubian forts, which cautions against using them as reliable comparisons for the study of ancient Egyptian domestic buildings.

Nevertheless, our knowledge regarding domestic structures dating to the Middle Kingdom has been substantially improved by the excavations at Elephantine, Wah-Sut (Abydos-South) in Upper Egypt, and Tell el-Dab'a in the eastern Delta, as well as by some new data from the reinvestigation of the town at Lahun. The following analysis will therefore only consider house layouts that can be identified with confidence as domestic in character. The pattern that emerges from the archaeological data also sheds new light on regional diversity and indicates some differences and similarities between elite residences and simpler domestic houses.

The Middle Kingdom was a time of major changes in the layout of mud-brick buildings of domestic and official function in comparison with that seen in the Old Kingdom evidence. A cultural break in the Old Kingdom tradition

occurred during the First Intermediate Period when regionality became an important feature of the material culture and architecture, which was only gradually replaced in the course of the Twelfth Dynasty by a more uniform style. Some differences in the layout of houses at state-founded and “planned” settlements in comparison with organically developed towns and cities are also worth considering further. Those differences might give a first glimpse of regional building traditions. Social status is another factor that could influence the layout and especially the size of residential buildings. This chapter will analyze a variety of building types and their characteristic features from excavated settlement sites that have already been discussed in the previous chapters. Some additional examples of houses for which a wider townscape might remain relatively unknown will be also discussed, such as the houses excavated at the cemetery of el-Lisht. This presentation will allow for a better grasp of the wider framework in which certain types of houses have been found and shed some light on the living conditions and social status of the inhabitants. It is important in this respect to take into consideration the type of settlements where the examples come from and to what extent the wider organization, size, and location of a townscape had any impact on the layout of its residential dwellings.

9.1.1 The typology of house layouts established by Manfred Bietak

The standard typology of house layouts dating to the Middle and New Kingdoms was first presented by Manfred Bietak and has recently been refined by Miriam Müller (Figure 9.1).⁶ Bietak established two main lines of development, based on the evidence from two sites – Tell el-Dab’a and Amarna. The typology consists of two house groups, A and B, that show a gradual evolution from the simplest type of two-room houses to large, elaborate buildings (see Figure 9.1). Group A is based on the evidence from the Middle Kingdom settlement at Tell el-Dab’a. The simplest version of this type is the so-called snail-house layout, which has been attested at Tell el-Dab’a in areas F/I and A/II (Figure 9.6) for the phases c and G/1–3 (see Table 8.2). These are two-room houses characterized by a larger room (main living room) lying adjacent to a slightly smaller room (side room), with a frequent orientation in a north–south direction and the main entrance on the northern side of the larger room (Figure 9.1, Type I). Access to the side room was possible through the northern or southern part of the central dividing wall. The second

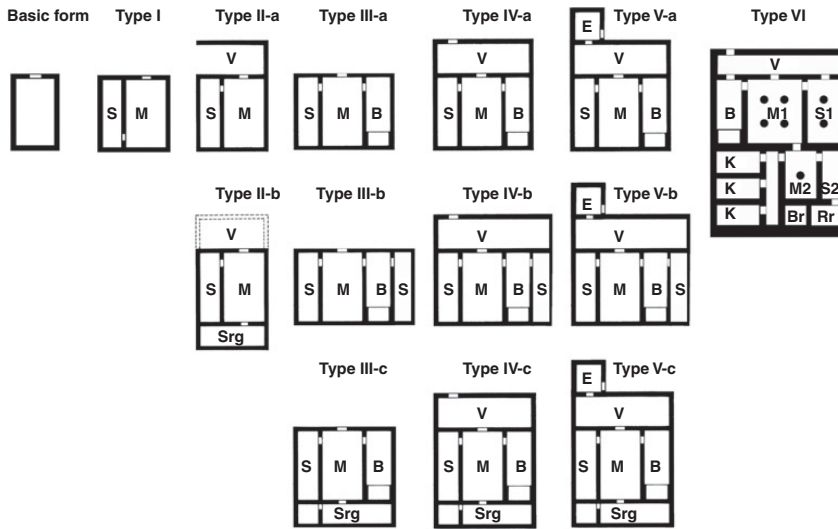
type (II) saw an addition of a large vestibule in front of the two-room group, which added a note of privacy to the two rooms in the back because it was no longer possible to get a glimpse of the interior from the main entrance – usually situated off to the side and not in the main axis (Figure 9.1, Type II-a). Another room of comparable size could be situated toward the rear of the building (Type II-b, Figure 9.1). This type of house was encountered during excavations of the planned settlement at Ezbet Rushdi, uncovered beneath the later Twelfth Dynasty temple building (phases e/1–4; see Figure 9.4).⁷ Two house units following exactly this layout, with a vestibule and rear room, have been excavated here.

The addition of another room to the other side of the main room creates a tripartite layout that then often formed the central core unit of the houses (Type III, Figure 9.1). This arrangement is typical for the Middle Kingdom and has been found at many settlements, including Tell el-Dab’a, Lahun, and Wah-Sut. One of the side rooms flanking the main room would have been used as the bedroom, which can be recognized by the presence of a bed niche to the rear of the room (Figure 9.1, Type III, a–c). The addition of further rooms to the side or at the rear creates several variants of the same building type and seems to have provided further areas for food preparation and storage. Type IV is marked by a vestibule built at the front of the house, which had the same effect as the vestibule of Type II in preventing a direct view into the house’s interior from the main entrance (Figure 9.1). Types V and VI are further elaborations of the same tripartite core unit through the addition of more rooms to the rear and a small square entrance room in front of the vestibule (E). Domestic buildings of Types III to VI have been excavated at Tell el-Dab’a in area F/I, where a gradual increase in size and complexity of houses can be followed from the late Middle Kingdom onward, up to the early Second Intermediate Period, phases E/3–E/1 (Table 8.2). A special feature only present at Tell el-Dab’a is the occasional addition of a burial chamber against the exterior wall of the bedroom (see Figure 9.8).

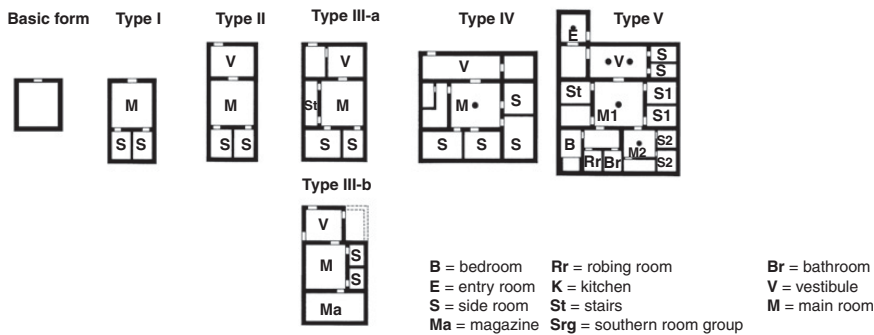
The general characteristics of Group A established by Bietak – further refined by Müller – are the location of the main rooms, including the more “private” bedroom, in the center of the building, and further additions are usually featuring along the sides and rear parts of the tripartite core unit.

The second major group of house types (Group B) is modeled mainly on the evidence from Tell el-Amarna

Houses of Group A : the Tell el-Dab'a house



Houses of Group B : the Tell el-Amarna house

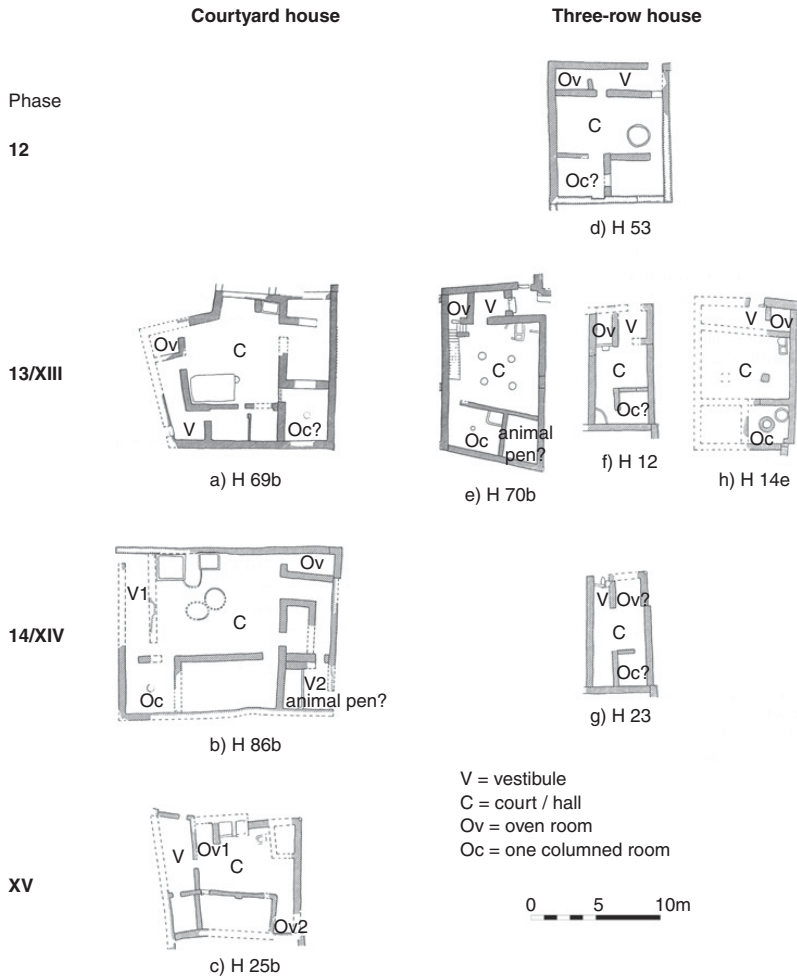


9.1. Typology of Middle Kingdom house types. After M. Bietak, “Zum Raumprogramm ägyptischer Wohnhäuser des Mittleren und Neuen Reiches,” in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 24, fig. 2; and M. Müller, “Das Stadtviertel F/I in Tell el-Dab’a/Auaris. Multikulturelles Leben in einer Stadt des späten Mittleren Reichs und der Zweiten Zwischenzeit,” PhD thesis, University of Vienna 2012, 42, fig. 3. © M. Bietak.

(Eighteenth Dynasty, New Kingdom), but it has its origins in the Middle Kingdom. Group B's principal difference from Group A is the arrangement of the private rooms *behind* the main central room instead of adjacent to it (see Figure 9.1). Its origins might be linked to the so-called three-room house (Dreiraumhaus), which according to Herbert Ricke consists of a main living room with two smaller rooms in the back.⁸ This type of layout can also be encountered at several of the Nubian fortresses, but as noted earlier, the precise function of these units in this case cannot be established as solely residential. It is possible that its origins date back to the Old Kingdom,

but not enough representative and securely dated examples have been found thus far to confirm this. Three-room units probably used as temporary accommodation have recently been excavated at the pyramid complex of the Fourth Dynasty ruler Radjedef at Abu Rawash (see Section 5.2.1.1). However, these units show a different organization of the access patterns, in which the larger room in the front gave direct access to only one of the back rooms, from which the second room in the rear could be entered (Figure 5.5).

In a second phase of development concerning Group B, a vestibule was added to the front in Type II



9.2. Courtyard houses and “three-row” houses from the Middle Kingdom at Elephantine. By G. Marouard, after C. von Pilgrim, “Elephantine im Mittleren Reich: Bemerkungen zur Wohnarchitektur in einer ‘gewachsenen’ Stadt,” in M. Bietak (ed.), *Haus und Palast im Alten Ägypten*, Wien, 1996, 257, Abb. 4. Courtesy C. von Pilgrim.

(Figure 9.1). This layout is well attested for Middle Kingdom houses at Elephantine (Figure 9.2, d–g). Cornelius von Pilgrim has termed this specific arrangement of rooms as the “three-row house” according to the vestibule forming the first row, the central living room the second, and the two rear rooms the third.⁹ This type of house plan seems to have its origin in the Middle Kingdom, and none of the Old Kingdom examples presented by von Pilgrim is without problems.¹⁰ The examples from Snofru’s pyramid complex at Dahshur are most likely buildings dating to the Middle Kingdom reoccupation, and the one case from Abusir (pyramid temple of Neferirkara) does not quite exhibit the same layout, as the front row, strictly speaking, is of an L shape.¹¹ In addition, some caution is required in using examples of “priests’ accommodations”

at royal mortuary temples as comparisons for domestic buildings within a larger townsite. The excavations of the mortuary complexes of the Old Kingdom were not always undertaken according to stratigraphic considerations and leave much doubt as to the precise chronological assignment as well as the publication of the architectural details.¹² The recent excavations of the buildings situated within the courtyard of the “expanded temple” of the Raneferef mortuary temple at Abusir do not show any examples that would belong to the type of three-row houses. One of the units along the southern side of the courtyard has a somewhat tripartite layout, but the access ways are distinctly different (Figure 5.7, y and w).

In Type III of Group B, additional rooms and architectural features are added along one of the sides of the

central room in the second row. This can be in the form of two small side rooms or a staircase (Figure 9.1, Type III, a–b). In its most complex form, Types IV and V, the central room is surrounded on all four sides by additional rooms and the general form of the layout exhibits a square shape. In these cases, the central room is usually also in a square format, in contrast to the rectangular shape of the main room of Group A (Figure 9.1). The most elaborate type of Group B, Type V, is the one that has been excavated at Tell el-Amarna and shows the continuous evolution of this group from the Middle Kingdom into the New Kingdom.

In addition to these two groups of house layouts, a third one can be added based on the evidence from the Middle Kingdom settlement at Elephantine. These are houses that have an open courtyard as their central feature, providing access from the courtyard to the individual rooms arranged along its sides (Figure 9.2, a–c).¹³ Most examples show rooms along three sides of the courtyard. These houses at Elephantine usually extended over an area of more than 100 m², while smaller buildings were laid out according to the principles of the three-row house of Group A, Type II, outlined earlier in this section.¹⁴ This third group of house layouts has been encountered mainly at the settlement of Elephantine, which evokes the strong possibility that it is a local form specific either to Elephantine or Upper Egypt. No comparative material from the Middle Kingdom at any other site in the south has been found that could shed more light on the question of regionalism.¹⁵ As will be discussed in Section 9.2.1, some kind of regionalism seems to be noticeable also for residential complexes of palatial proportions.

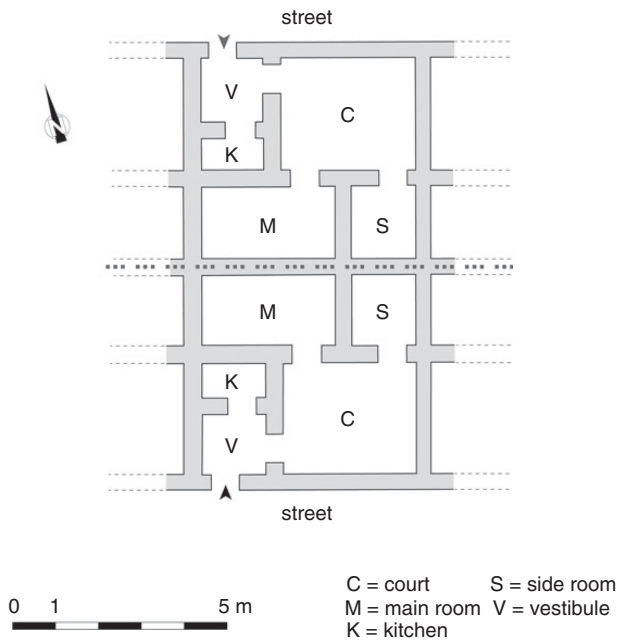
The current analysis of Middle Kingdom house layouts is based not only on the few recurrent and cited key examples from sites such as Lahun and Tell el-Dab'a but also takes into account the evidence from a larger number of excavated settlements situated within different regions in Egypt. In addition, the specific functions of rooms are assessed when possible, although this can be a challenge due to the limits of available documentation and evidence. As has already been mentioned in Section 6.6, as far as the analysis of Old Kingdom houses is concerned, it is often problematic to assign a sole function to a room based on its layout alone.¹⁶ Certain installations such as fireplaces, ovens, quern emplacements, bed niches, and storage containers, among others, provide some information about the activities carried out within rooms and the location of certain

activity areas, but in many cases they reveal an overall multifunctional use.¹⁷ Multifunctionality can be addressed in two possible ways. The first is a conceptual approach linked to social practices and experience as well as the conscious decisions of the inhabitants as to the use of interior space.¹⁸ The other approach, which is more easily recognizable in the archaeological record, is the physical evidence for numerous household activities being carried out in a single space and the recognition of specific activity areas within a building. Closely linked to this discussion of multifunctionality in relation to Egyptian domestic architecture is also the fact that it is almost impossible to identify administrative space solely from architectural evidence, as there seems to be no specific architectural form that clearly designated exclusive administrative use. Material evidence found in buildings, such as broken clay sealings, provides good evidence that administrative tasks, whether on a private or official level, could be carried out in buildings that also had, and sometimes even primarily, a residential character. As a consequence, it is possible to make a case for the existence of so-called hybrid households that can combine official and private functions within the same structure.¹⁹ The notion of strictly public and administrative architecture per se, which is known, for example, in the later Greco-Roman or Byzantine periods, did not really exist in Pharaonic period Egypt.

In addition, it is important to be aware of the fact that items found on the floors of houses during excavations are not always reliable indicators of room use. They could have been left behind after the abandonment of the structure and might not provide an accurate picture of activities being carried out specifically in the space where these were found, especially if they are moveable objects.²⁰ A sudden event of catastrophic destruction, for example by fire, leaves many additional clues about the precise use of rooms.²¹

9.2 HOUSES IN THE RESIDENTIAL QUARTERS OF TELL EL-DAB'A

After initial settlement occurred at Tell el-Dab'a in the form of two planned settlements in area F/I and Ezbet Rushdi, the late Middle Kingdom is characterized by quite a different development, starting as a more loosely organized settlement covering a large area.²² As has been described in Chapter 8, the Tell el-Dab'a region was characterized by several waterways and natural harbor-basin formations that allowed settlement along the banks



9.3. House layouts of the early Middle Kingdom settlement (phase e/2-3), area F/I at Tell el-Dab'a. By G. Marouard, after E. Czerny, *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*, Vienna 1999, 21, Abb. 3. © Austrian Archaeological Institute.

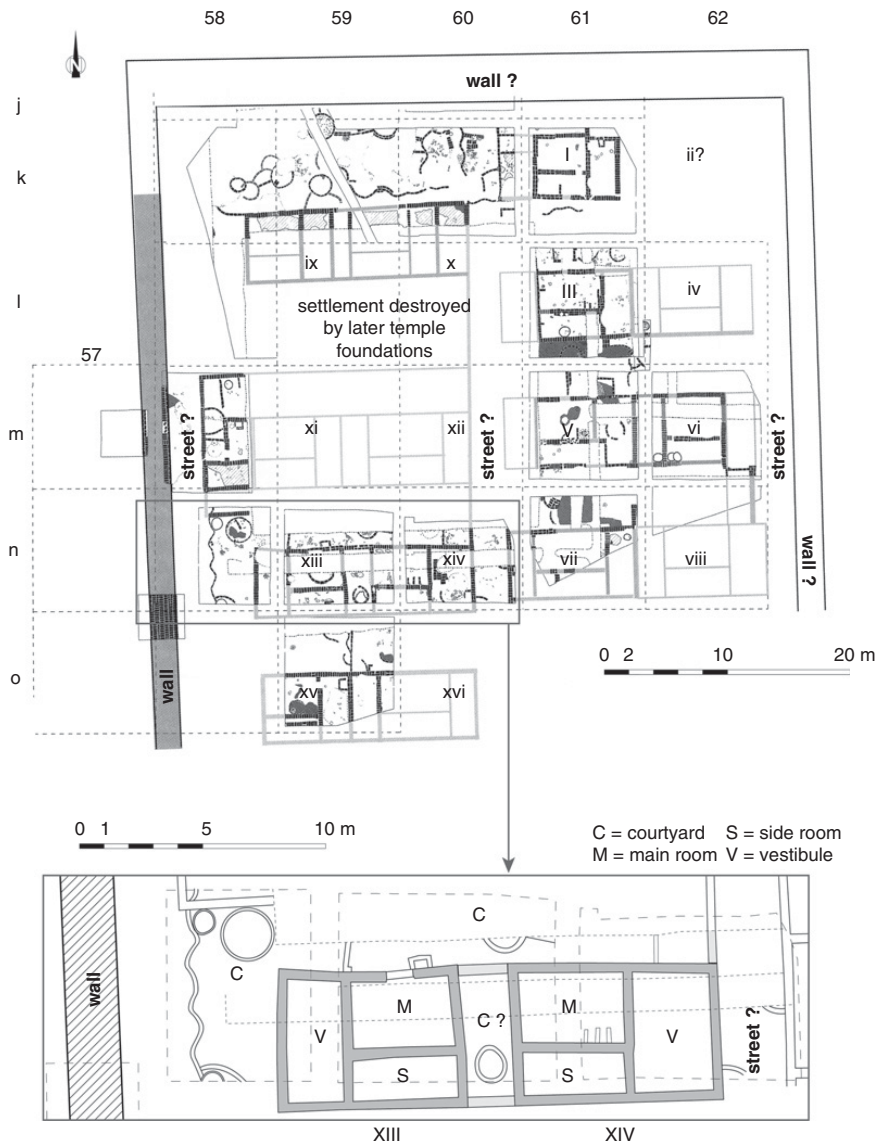
and higher-lying areas, sometimes forming larger islands and peninsulas (Figure 8.48).²³

The houses excavated within the first settlement of the early Middle Kingdom in area F/I are of very small size, covering only 27 m². The largest space available is a square courtyard that gave access to two small rooms in the rear (Figure 9.3). The court was entered via a small vestibule, which also had an entrance to an even smaller kitchen. This layout can be considered a variant of Group B, Type III, according to the square court fronting two private rooms in the back of the house. This is probably one of the oldest examples of such a layout, which has been securely identified and can be dated to the Eleventh Dynasty. However, after the initial foundation of this settlement, additions and changes were quickly made by the local inhabitants in order to adapt the houses more to their needs, which seem to have been inadequately met in the original planned form.²⁴

Ezbet Rushdi, another preplanned settlement in the Tell el-Dab'a region that has been excavated, has seemingly uniform house plans dating to the first half of the Twelfth Dynasty (Figure 9.4).²⁵ The houses consist of a three-room unit each, which clearly belongs to Group A

(Type II-b; see Figure 9.1). A rectangular entrance room or vestibule gave access to two adjacent rooms: a slightly larger living room with a doorway into the side room (Figure 9.4). Some houses had another room at the rear that was similar in size to the vestibule at the front. On the outside of the buildings, the inhabitants made use of shared open courtyards, which were sometimes partitioned by sinusoidal walls. Round silos have often been found in this open ground around the houses. This repetitive layout can be recognized for the majority of the houses, with very few variations among them. Their size was slightly larger than the structures excavated at the earlier planned settlement in area F/I, covering about 50 m² to 60 m², which reaches almost 100 m² when the additional exterior yard space is taken into consideration.²⁶

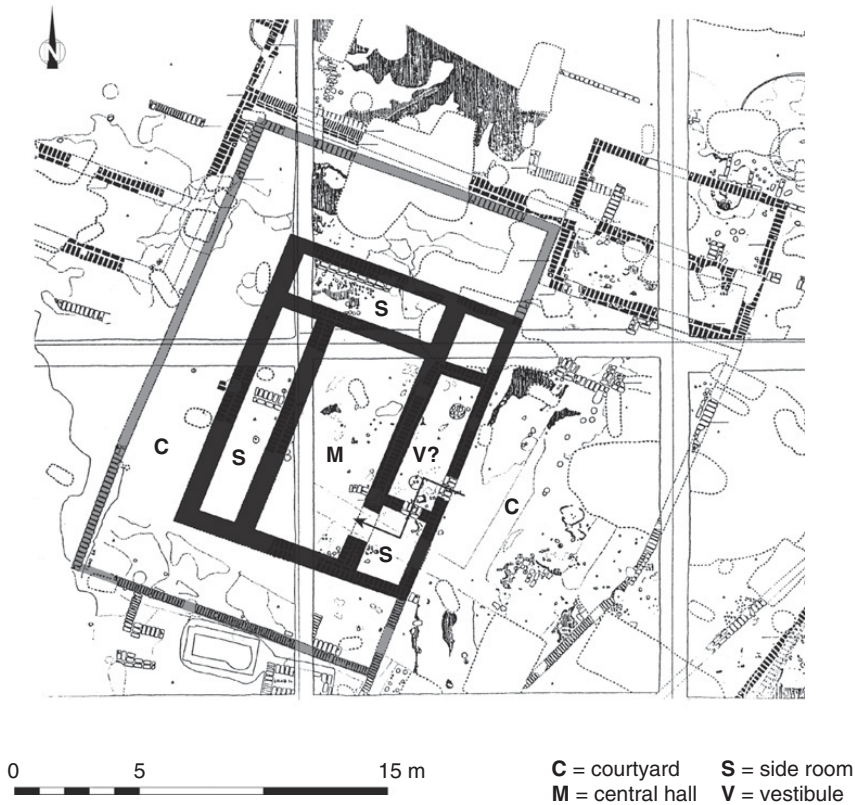
The late Middle Kingdom at Tell el-Dab'a was marked by an influx of Canaanite settlers at the site, which can be witnessed by the discovery of some domestic structures that do not resemble Egyptian layouts – such as the so-called Middle Room House (Mittelsaalhaus) and the Broad Room House (Breitraumhaus) (Figure 9.5).²⁷ These buildings stood within a larger plot of land that was enclosed by a separate wall, creating some open space around the actual house. Also foreign to Egyptian customs was the presence of tombs attached to the exterior of the housing plots.²⁸ This part of the settlement has been excavated in area F/I and has been assigned to phase d/2 = H, which dates to the late Twelfth Dynasty (Table 8.2). It lay in close proximity to a larger cemetery further south.²⁹ The core of the so-called Mittelsaalhaus follows a tripartite layout consisting of the central hall, the largest room, flanked by an almost-identical room on each side. Perpendicular to these three rooms was another wing consisting of two further rooms (Figure 9.5). The main entrance seems to have been from the eastern side and does not lie within the central axis of the building.³⁰ The main doorway was accessed by crossing the large yard on the eastern side.³¹ In addition, a walled courtyard area surrounded the house on the western, northern, and southern sides but was not directly accessible to the east. This house was thus freestanding on its own plot of land, which included some open space enclosed by a thin wall. The long hall that formed the central feature of this building measures 9.7 m × 3.8 m. In total, this house covered an area of about 144 m². While large halls as central rooms are also a common feature in Egyptian houses as outlined earlier, the proportions of this example are different (1:2.5) and can be compared with the layout



9.4. Houses of the first half of the 12th Dynasty (phase e/3), area R/I (Ezbet Rushdi) at Tell el-Dab'a. By G. Marouard, after E. Czerny, "Fragments of Information. Observations concerning the Architectural Layout of the Middle Kingdom Settlement at 'Ezbet Rushdi,'" in M. Bietak et al. (eds.), *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 79, fig. 7.

of domestic buildings encountered in Palestine dating to the Middle Bronze Age.³² Medium-size houses of comparable layout and size have been found at several sites such as Ashdod, Megiddo, and Jericho,³³ and all are characterized by a central hall of similar proportions. In all of these examples, the width of the hall measures between 3.5 m and 5.00 m, which is probably linked to the roof constructions and wooden beams that were used. The average surface of such buildings covers about 150 m². Thus, the house excavated in area F/I at Tell el-Dab'a compares relatively well with these Palestinian

examples, with which it shares the same chronological time frame. This is also further evidence for the possible origins of the inhabitants at Tell el-Dab'a during this phase of settlement. Other buildings of this settlement phase in the vicinity of the Mittelsaalhaus at Tell el-Dab'a constitute two-room structures of Type I, Group A (Figure 9.1). Pottery from this phase of occupation has a proportion of 20 percent imported wares from the Syro-Palestinian region, with the remainder of Egyptian character. The tombs to the south provided further information about the inhabitants of this town. The burial



9.5. “Mittelsaalhaus” of Palestinian origin (phase d/2, late 12th Dynasty), area F/I at Tell el-Dab’a. After M. Bietak, *Avaris, the Capital of the Hyksos: Recent Excavations at Tell el-Dab’a*, London 1996, fig. 8. © M. Bietak.

goods contained a large proportion of weapons, which prompted Bietak to suggest that they might have belonged to soldiers who were employed by the Egyptian army.³⁴ Another possibility is that these foreign settlers might have been involved in long-distance trade with various regions of the eastern Mediterranean.³⁵

The very simple type of two-room house still appears in the early Thirteenth Dynasty town at Tell el-Dab’a and was found in area A/II as well as F/I (Figures 9.6 and 9.7).³⁶ In some cases, a vestibule was added in front of both rooms. The main difference to the older examples is that these buildings are larger in their overall size, with up to 75 m² for houses with two rooms. Additional rooms were sometimes added to the core unit, but in a seemingly unplanned fashion so that no specific layout pattern is recognizable. The size of these houses was gradually increased to an overall size of up to 100 m² (Figure 9.6).³⁷ The open space between the houses was used as yards and frequently contained installations for keeping animals and storage facilities.

In general, the settlement organization also increased in density between the end of the Twelfth/early Thirteenth

Dynasty and the mid-Thirteenth Dynasty. However, the settlement can still be characterized as loosely organized, with much free space between houses and larger courtyards along the exterior that were often enclosed by a fence or a thin perimeter wall. The following settlement phase, which dates to the second half of the Thirteenth Dynasty, shows buildings of a more elaborate character (area F/I, phase b/2 = E/3, see Table 8.2). There is a noticeable change in the size and layout of the individual buildings, which by now was purely Egyptian in character (Figure 9.8). The houses were much larger, and many of them show the typical tripartite layout of Group A, Type IV (Figure 9.1).³⁸ A long vestibule lies in front of the core unit, which gave access through a central doorway into the main room of the house. From here, the two side rooms flanking the central space can each be accessed through a doorway (Figure 9.8). One of the side rooms was usually equipped with a bed niche and can be designated as a bedroom. To the rear, further rooms were present that also had accessibility through the central room. The vestibule had the form of a large hall and was often the largest room of the house. No specific installations have been

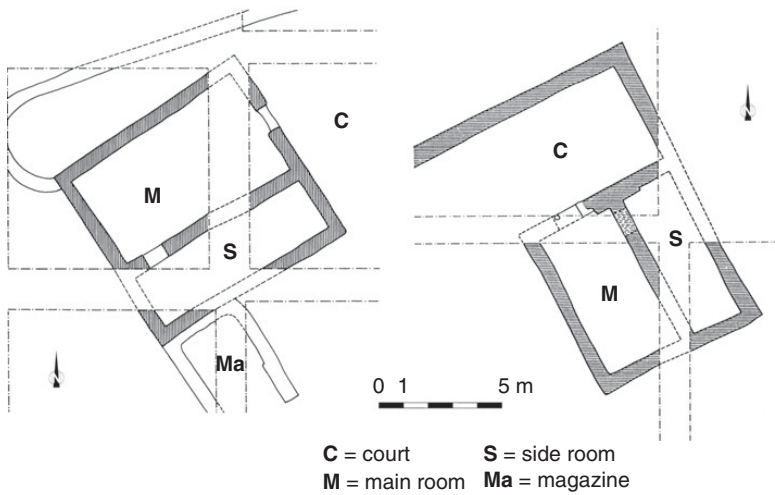


9.6. “Egalitarian” settlement pattern with two-room houses of phase G/1–3, area A/II at Tell el-Dab’a. After M. Bietak, “Houses, Palaces and Development of Social Structure in Avaris,” in M. Bietak et al. (eds.), *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 40, fig. 14. © M. Bietak.

found here that would indicate any specific activities that had once been carried out within.³⁹ The main room in the center of the building is the second-largest room, but it also did not reveal any hints for particular household activities, an observation that has reinforced the interpretation that it served as a reception room for guests.⁴⁰ This identification remains questionable because there is no evidence for any specific architectural feature that relates to a solely representative function. Even the presence of columns does not necessarily support a purely representative character – clearly illustrated by the evidence from Elephantine, where the central room in many cases served as the main living room for the inhabitants (see Section 9.7). Apart from the bedroom, which is one of the more easily recognizable rooms in these houses due to the bed niche, the other side rooms attest to a variety of functions such as cooking activities witnessed by fireplaces, storage, and food production facilities. However, it is rare that one

specific room can be assigned to one specific activity alone; the archaeological evidence indicates that these were multifunctional spaces and used for different purposes according to the needs of the inhabitants.⁴¹ The two elongated rooms next to the main core of the building might have been used as storage magazines and workshop areas. Against the exterior of the bedroom, in several cases a burial chamber had been attached, strongly suggesting that the inhabitants of these Egyptian-style houses were settlers of foreign origins who adhered to their particular burial traditions (Figure 9.8). In the exterior space around the houses, additional installations have frequently been excavated, such as round grain silos and troughs for animals.⁴²

Over time, these houses and their plots were increasingly rendered more complex by the addition of further rooms, which gradually reduced the open space around the houses and contributed to a more dense settlement pattern.⁴³ By



9.7a. Simple two-room house (phase G/I-3, 13th Dynasty), area A/II at Tell el-Dab'a. After M. Bietak, "Zum Raumprogramm ägyptischer Wohnhäuser des Mittleren und Neuen Reiches," in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Vienna 1996, 24, fig. 3. © M. Bietak.

9.7b. Two-room house with vestibule (phase c, 13th Dynasty), area F/I at Tell el-Dab'a. After M. Bietak, "Zum Raumprogramm ägyptischer Wohnhäuser des Mittleren und Neuen Reiches," in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 25, fig. 4. © M. Bietak.

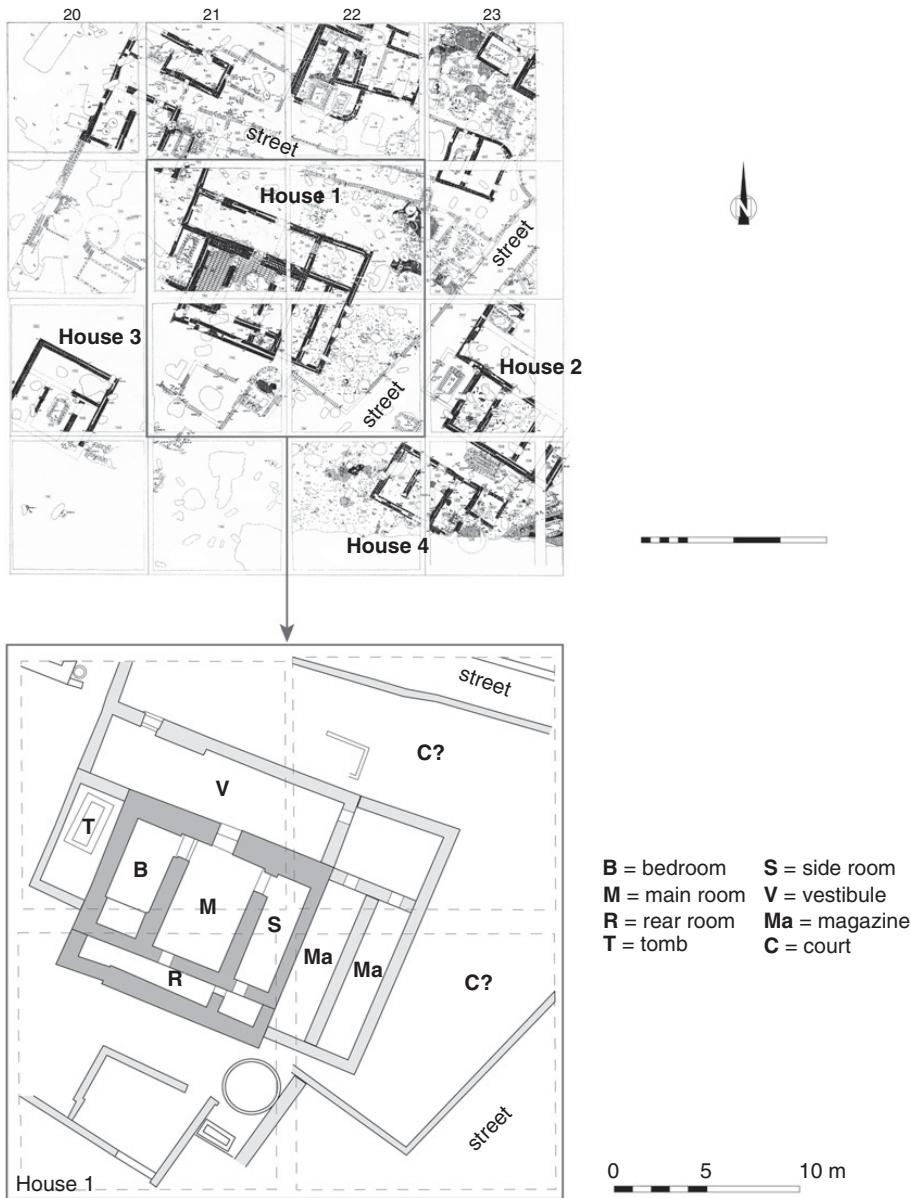
phase E/2, which dates to the early Second Intermediate Period, some of the houses covered between 300 m² and 450 m² in area F/I, which is a considerable augmentation in comparison with the older occupation levels (Figure 9.9). Smaller versions covering about 150 m² are present too.⁴⁴ At least two buildings show the former two-room unit, but with additional rooms added to one side. Thus, the older type persisted for smaller domestic houses, and they occurred together with much larger structures in the same neighborhood. It is possible that some of the smaller buildings were used by additional members of the household in a fashion similar to what has been noticed at the residential areas of Amarna.⁴⁵ Bietak characterized this settlement phase as showing an increase in social differentiation, which is certainly a sign for the evolution toward an increasingly urban character of the town.⁴⁶ Numerous rooms were added to the exterior of the tripartite core unit, forming large houses (see Figure 9.9).⁴⁷

The inhabitants were still of foreign origins but probably had been faring rather well in this area if larger, more complex houses can be interpreted as a sign of increased prosperity among the inhabitants. The evolution of the material culture is also noteworthy in this respect because it shows a gradual decline in the percentage of foreign pottery, which had attained about 40 percent in phase F

and declined to about 10 percent by the end of phases E/2 and E/1 (see Table 8.2).⁴⁸

9.2.1 Palaces/elite residences at Tell el-Dab'a dating to the Middle Kingdom

In terms of Middle Kingdom elite houses found at Tell el-Dab'a, additional evidence comes from a late Middle Kingdom palatial context that has close parallels to the largest houses at Lahun and the mayor's residence at Wah-Sut (Figure 9.10). This large complex of palatial proportions covered an area of about 4,000 m² and was excavated in area F/I. It can be dated to the early Thirteenth Dynasty (Table 8.2, phase d/1 = G/4), which predates the residential quarters in the same area described in the previous section.⁴⁹ The palace consisted of several main structures that were interconnected by doorways and corridors. Several groups of rooms can be recognized that were built in the tradition of Group A, Type IV (see Fig. 9.1), but on a much larger scale and with elaborate columned porticos or peristyle courts in front of the core units instead of simple vestibules. The entrance area is marked by a long columned portico (P) that gave access to a central staircase (St) that was flanked on either side by a group of three rooms consisting of a main room, a side room, and another one in the rear

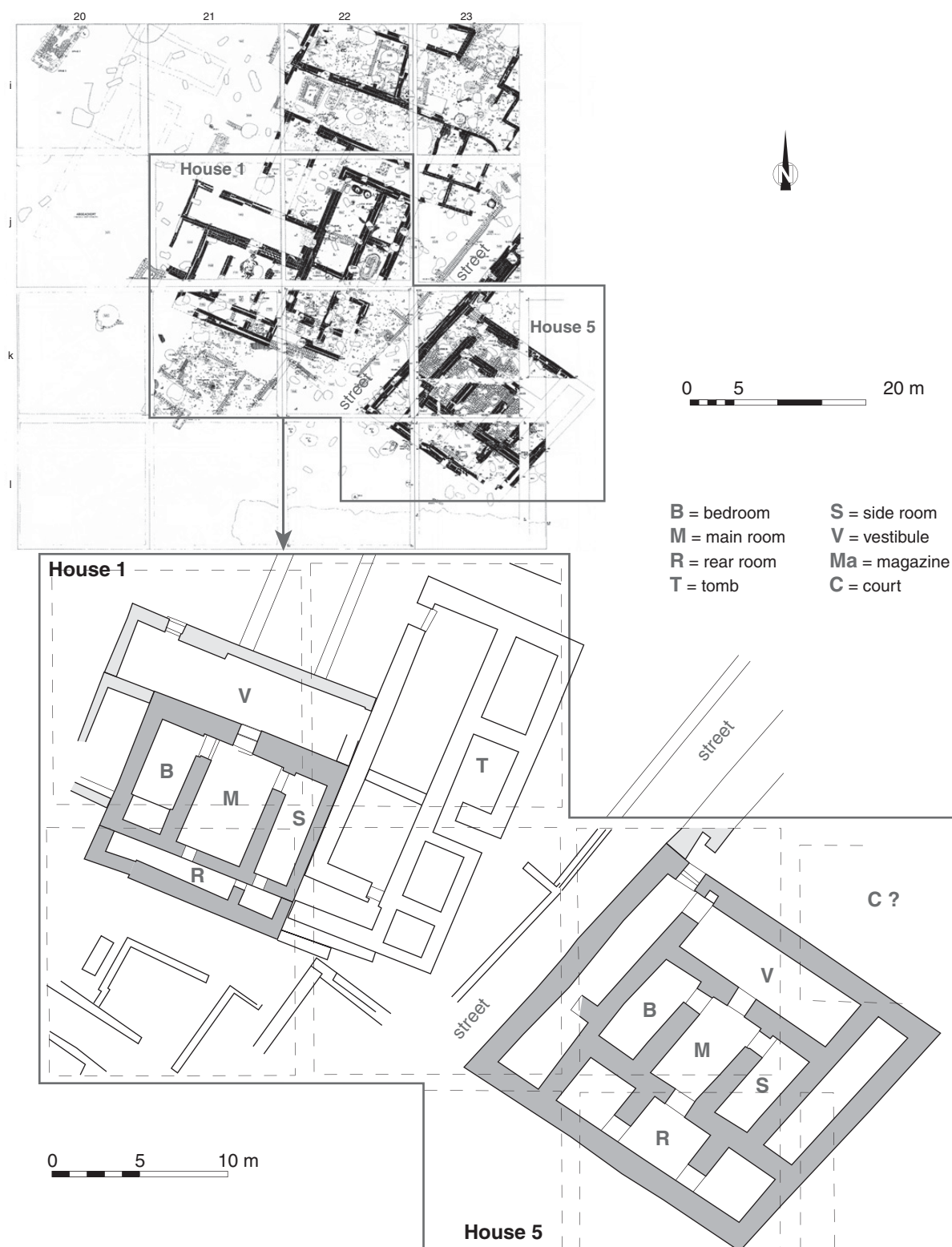


9.8. Houses of the late 13th Dynasty (phase E/3), area F/I at Tell el-Dab'a. By G. Marouard, after M. Bietak, "Houses, Palaces and Development of Social Structure in Avaris," in M. Bietak et al. (eds.), *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 41, fig. 15.

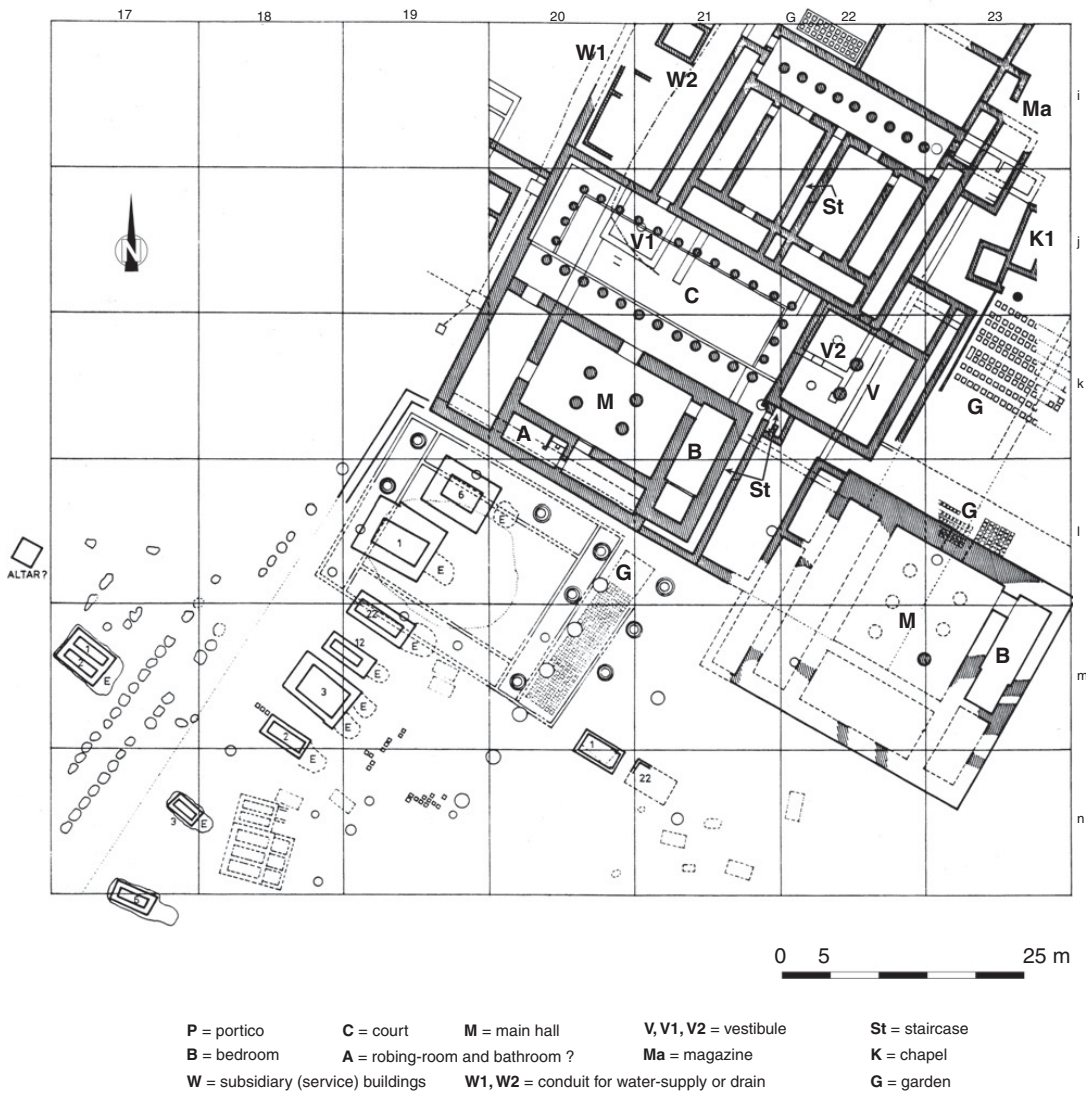
(Figure 9.10). Along the exterior of each of these symmetrically organized room groups, a long corridor led toward the interior of the complex. In the original layout, each corridor ended in a small vestibule (V1 and V2) that lead into the large, open courtyard (H), which also had a columned portico on its southern side. In a second building phase, further columns were added on the remaining three sides so that the courtyard was turned into a peristyle court (Figure 9.10). By that time, vestibule V1 had

lost its function and the western corridor led directly into the courtyard. A centrally positioned doorway on the southern side of the courtyard opened into a central room that had been equipped with four columns (M). This central hall was flanked on each side by a rectangular room of which the eastern one had a so-called bed niche, a feature that is typical for houses of Group A (see Figure 9.1). Behind the central room, two smaller rooms were added during a second building phase (A).⁵⁰

HOUSE LAYOUTS IN THE MIDDLE KINGDOM



9.9. Houses of the early Second Intermediate Period (phase E/2), area F/I at Tell el-Dab'a. By G. Marouard, after M. Bietak, "Houses, Palaces and Development of Social Structure in Avaris," in M. Bietak et al. (eds.), *Cities and Urbanism in Ancient Egypt*, Vienna 2010, 42, fig. 16.



9.10. Palatial complex of the early 13th Dynasty (phase d/1), area F/I at Tell el-Dab'a; general plan of the excavated area, including gardens and cemeteries south of the buildings. After D. Eigner, "A Palace of the Early 13th Dynasty at Tell el-Dab'a," in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 74, fig. 1. Courtesy of D. Eigner.

According to the archaeological evidence, two major building phases for the core part of this palatial compound have been distinguished, but there is also much evidence for further elements to the east that were never completed. At some point, the doorway to the back rooms behind the columned hall was bricked up, as well as the entrance to the room with the bed niche. Because it was quite carefully done, it could have been a kind of "ritual act of abandonment." The precise reason for this action is unclear; the death of the owner has been suggested as a possible explanation.⁵¹ To the east of the peristyle court and the central hall unit, another building complex has been excavated

that shows a very similar layout (Figure 9.10.) Although there is no evidence for an entrance colonnade or a courtyard in front of its northern side, the same tripartite plan of the core unit can be recognized. The central room consisted of a columned hall of which only one column emplacement had been dug into the ground, while six columns might have been planned for it. This provides some evidence that this eastern addition to the complex was never completed either. On each side of the central hall, two side rooms were found; the southern one seems to have been equipped with a bed niche (see Figure 9.10). In relation to this eastern part of the palatial complex, the

newly built vestibule (V) – above the older, much smaller vestibule V2 – seems to belong to the construction phase of the second tripartite core unit and therefore might have served this eastern building complex.

Some of the architectural details of this palatial complex are remarkably similar to those of the large mansions at Lahun but also resemble the organization of the core unit, the corridors, and the courtyard with the columned portico of the mayor's residence at Wah-Sut in Abydos (see [Section 9.6](#)). No inscriptional evidence has been found at the Tell el-Dab'a that could provide some information about the inhabitants of this complex. Probably the best clue has been retrieved from the adjacent cemetery, which contained burials of high officials of foreign origin.⁵² Thus, a royal occupancy can be excluded, while the general size of this complex is somewhat comparable to the governor's residence (Building A) at Wah-Sut.⁵³ However, mainly the core of this palatial complex at Tell el-Dab'a has been excavated in detail; the magazine and service areas are less well known. One kitchen/service area was identified to the west (W1 and 2), but this has only been partially excavated ([Figure 9.10](#)). Additional functional areas might have been located to the east (Ma = magazine, K = chapel?). Thus, it is difficult to directly compare this building complex with any of the possible parallels beyond the layout of the core units. What is also missing is any evidence for administrative activity being carried out here.

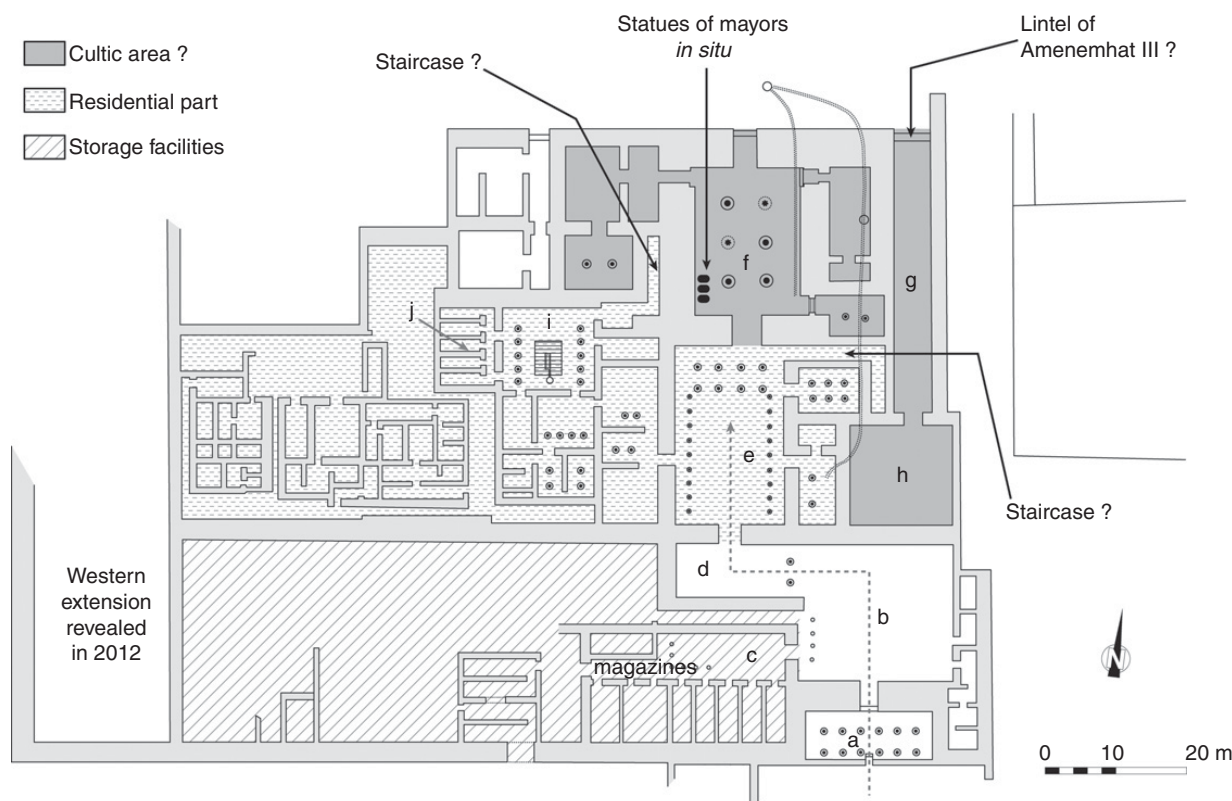
In general, the majority of the domestic architecture at Tell el-Dab'a follows the tripartite layout of Group A and shows, astonishingly, many parallels to the planned settlements at Lahun and Wah-Sut, which can be recognized at the palatial complex but also at the smaller domestic houses that succeeded the former. Although there is no evidence for any official town planning efforts by the Egyptian state at Tell el-Dab'a during the late Middle Kingdom, the choice of using an Egyptian layout that is best known for Middle Kingdom planned settlements is striking. Unfortunately, there is a big gap in our knowledge about houses of other contemporary settlements in the northern part of Egypt. Therefore, it can only be carefully suggested for now that the layout and house types of Group A might have been the northern (Memphite?) architectural tradition. The evidence from Upper Egypt is equally meager, but the houses at Elephantine follow a different architectural layout (see [Section 9.7](#)). The only other palatial complex dating to the Middle Kingdom that has been found is in the

southeastern Delta at Tell Basta/Bubastis, and it seems to follow neither of the known architectural traditions discussed so far.

9.3 TELL BASTA: A PALATIAL COMPLEX OF THE MIDDLE KINGDOM

The site of ancient Bubastis, also called Tell Basta, near the modern town of Zagazig in the southeastern part of the Delta, about 50 km north of Cairo ([Figure 9.1](#)), provides archaeological evidence for a large palatial complex dating to the Middle Kingdom that covers at least 1 ha.⁵⁴ This is by far the largest palatial complex for this period that has been excavated. Unfortunately, little is known about the corresponding settlement. The published plan of this complex shows several interconnected parts, distinguished by specific architectural details ([Figure 9.11](#)). There is only very limited information about what was found inside the various rooms, courtyards, and halls, and there are no details about any signs that stem from their occupation, such as fireplaces, manufacturing activities, and storage vessels. No details are presented about the stratigraphic record, which could have indicated the different phases of occupation, construction, and abandonment. This situation makes any precise analysis and evaluation concerning the changes in its occupation difficult. Nevertheless, it is an important building complex that has not received much attention in previous publications and should certainly be considered as another example of Middle Kingdom elite architecture.

The palatial complex consists of magazine tracts, residential quarters, and several columned halls and open courtyards of monumental size. A substantial brick wall measuring 2.25 m in width encloses the whole complex.⁵⁵ One of the identified entrances, a gateway with a stone threshold, leads into the southeastern corner and gave access to a hypostyle hall (a) with two rows of six columns each ([Figure 9.11](#)). Opposite this rather small doorway, a much larger gateway, originally encased in stone elements, leads into a large open courtyard (b). Two very thick mud-brick walls, resembling a pylon and measuring about 4 m in width, flank this second gateway, which is remarkable from an architectural point of view. From the open court (b), a smaller doorway to the west opens into a magazine tract (c) that consists of a small courtyard that had probably also been surrounded by small columns. Six of them are shown on the plan, and a row of rectangular magazines is situated to the southern side ([Figure 9.11](#)). This layout fits extremely well with the

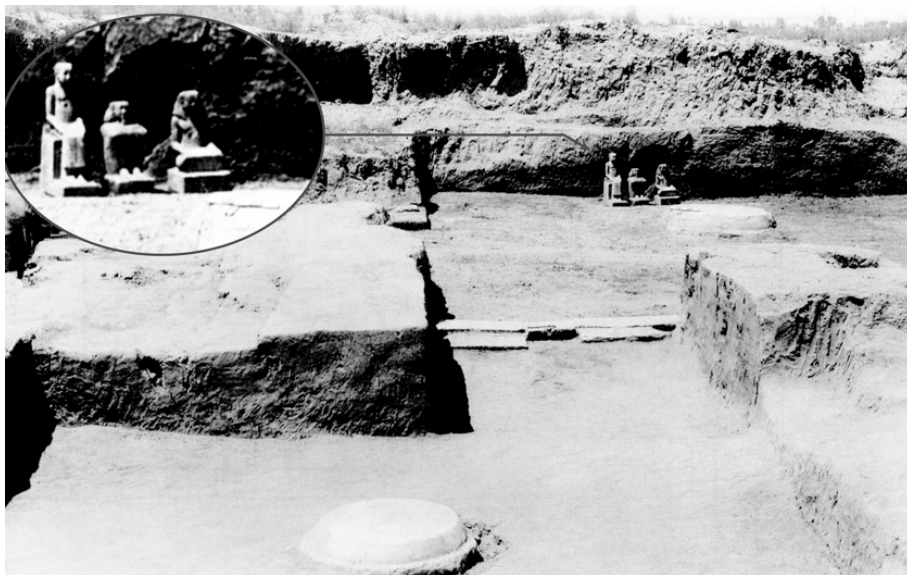


9.II. Plan of the Middle Kingdom palace at Tell Basta. By G. Marouard, after C. van Siclen, “Remarks on the Middle Kingdom Palace at Tell Basta,” in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 239, fig. 1. Courtesy C. van Siclen.

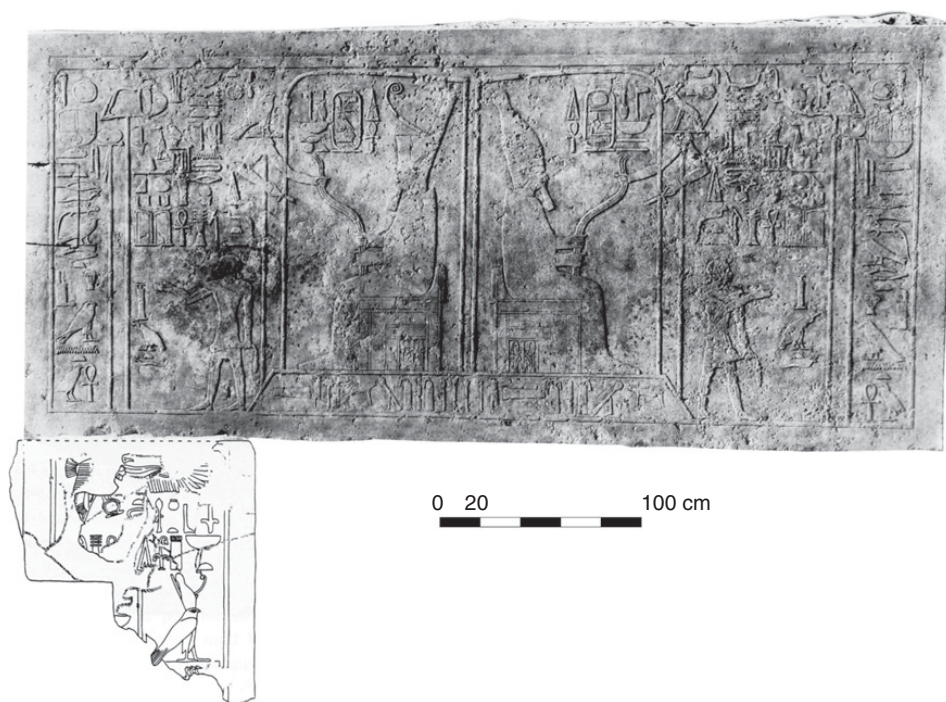
pictorial evidence for administrative quarters, in which scribes are depicted seated in a columned courtyard adjacent to storage facilities and granaries.⁵⁶ Further magazines seem to have extended to the west, but here the plan remains incomplete. Magazine areas flanking the residential core of the palatial complex have also been noted at the late Old Kingdom complex at Ayn Asil in the Dakhla Oasis.⁵⁷

Apart from providing access to the magazine tract of the complex, courtyard (b) also has an extension to the west that is entered through a two-columned portico (d) leading through another gateway into a large peristyle court (e), which constitutes the main access way into the inner part of the palace. This court (e) is decorated with two rows of nine columns each on its eastern and western sides. The northern side shows a double row of four larger columns, through which another doorway is reached, giving way into another columned hall (f) containing six columns – the largest ones excavated within this building complex. This hall not only has the largest column bases but also the thickest walls of the whole

complex.⁵⁸ There is some indication that this part of the palace might have served some official or ceremonial functions; the rooms on the eastern and western sides of hall (f) are unusually large for what is known for residential use and somewhat mimic the side rooms flanking the main room of the Tell el-Dab’a house Group A (see Figure 9.1). The official and representative purpose of this part of the complex is further confirmed by the discovery of three statues of the local mayors along the western side of hall (f) (Figure 9.12).⁵⁹ Further to the east lies a north–south corridor (g) that provides access to a square courtyard (h). The doorway between these two spaces had been decorated with a stone threshold and lintel, the latter found lying in front of the threshold. The lintel is decorated with a *sed*-festival scene of Amenemhat III (Figure 9.13).⁶⁰ It makes one wonder whether this area of the palace had been an addition to the original complex and might have been linked to a royal cult or jubilee (*sed*) festival ceremony.⁶¹ The presence of a temple or a chapel, suggested at the beginning of the excavations during the early 1960s, cannot be



9.12. View looking west into the main columned hall (f) with statues of the mayors in situ, Middle Kingdom palace at Tell Basta. After C. van Siclen III, "Remarks on the Middle Kingdom Palace at Tell Basta," in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 244, fig. 9. Courtesy C. van Siclen



9.13. Lintel and doorjamb fragment of Amenemhat III, Middle Kingdom palace at Tell Basta. By G. Marouard, after C. van Siclen III, "Remarks on the Middle Kingdom Palace at Tell Basta," in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 245, fig. 11. Courtesy C. van Siclen.

confirmed with much certainty from any of the architectural features except for the massive walls. However, the statues and the decorated lintel might be signs of the

presence of a cultic installation. As can be seen at the governor's palace at Ayn Asil, but also at Elephantine, these large elite residences did include *ka*-chapels for the



9.14. Drainage traps to the north of the Middle Kingdom palace at Tell Basta. After C. van Siclen III, “Remarks on the Middle Kingdom Palace at Tell Basta,” in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 242, fig. 7. Courtesy C. van Siclen.

cults of the governors.⁶² It is entirely possible that a similar function needs to be attributed to this northern part of the palace, which is marked by these very thick mud-brick walls (see Figure 9.11). The side rooms flanking the columned hall (f) would then have been used for ritual activity and not as residences, which is quite plausible given their dimensions and layout (Figure 9.11). They could have housed cults for the governors but also might have included a cult for the king if the interpretation of the Amenemhat III lintel is correct.

From a purely architectural point of view, the fact that the entrance between the columned court (e) and the columned hall (f) is not situated on the same axis as the former but slightly to the east could be an indication that these parts do not belong to the same building phase or that they were deliberately placed in this way to conceal the interior of the columned hall (f) from the exterior entrance (Figure 9.11). The residential quarters of the palatial complex seem to have been in the western part and were also accessible through a doorway in the western wall of court (e) (Figure 9.11). The plan is incomplete for these mud-brick structures filling the inside, and only one more coherent unit can be discerned – one with an open court and a water basin in its center (i). The rectangular water basin measured about 2 m in length and was embedded in the floor, which had been covered by a burnt/fired mud-brick pavement (Figure 9.15). The water basin was connected to a complex system of water



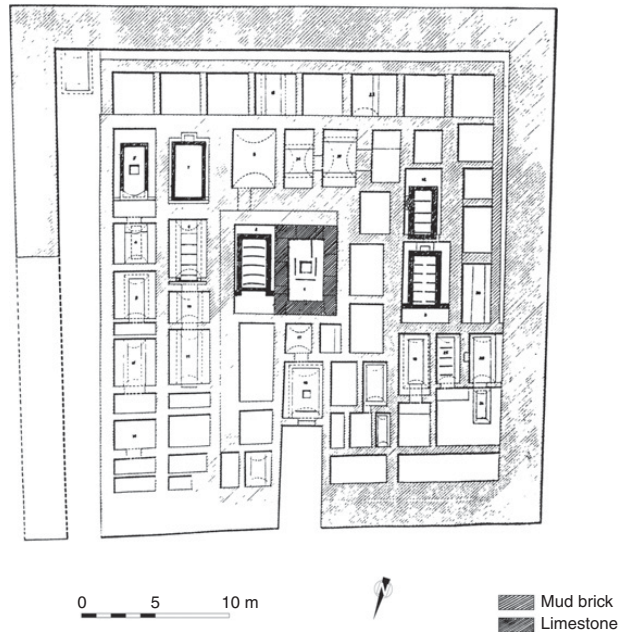
9.15. Water basin in the peristyle court (i), Middle Kingdom palace at Tell Basta. After C. van Siclen III, “Remarks on the Middle Kingdom Palace at Tell Basta,” in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 242, fig. 6. Courtesy C. van Siclen.

pipes, which is another striking feature of this complex. Some of these pipes have been excavated along the northern exterior of the palace complex (Figure 9.14). This open court with the water basin was decorated with two porticos of five columns each on its eastern and western sides. The latter was fronting a row of long rectangular magazines (j). Further rooms lay to the south of the court and might have been of residential nature. These rooms do not follow any known layout discussed so far and have no direct parallels to the houses at Tell el-Dab'a, to any of the Lahun mansions, or to the governor's residence at Wah-Sut. The residential part of the palace complex at Tell Basta does not fit any of the better-known types of buildings encountered in other parts of Egypt during the Middle Kingdom (see Figures 9.1 and 9.2). However, this might simply be further evidence as to the incomplete nature of our archaeological data.

The function of this large, elaborate building complex is difficult to establish, but a connection to the nearby tomb complex with contemporary burials of the mayors of the town is evident. It is noteworthy that the tombs are situated a few meters to the east of the possible cultic part of the palace.⁶³

This necropolis is also quite unusual in its layout, in which the tombs are organized within a square compound measuring about 84.3 m by 81.25 m, including a thick enclosure wall and consisting of multiple rows of burials and a thick stone-lined tomb chamber in the center (Figure 9.16).⁶⁴ The only example that might be comparable is the First Intermediate Period/early Middle Kingdom cemetery at Memphis.⁶⁵ Originally, the burial complex at Bubastis had two floors, but only the lower level has been preserved. Such multiple-floor tomb structures are unusual and might reflect a local tradition. Some of the tombs were covered with mud-brick vaults, and six of them had limestone vaults.⁶⁶ This gigantic tomb complex included numerous tombs of the local mayors and their families but also a row of square magazines.⁶⁷

The palace was clearly a major governor's palace that included residential and administrative areas and possibly also a cultic part to the northern half, which is indicated by the discovery of three statues belonging to these Middle Kingdom mayors. One of the statues was inscribed with the name of the mayor and overseer of priests, Khakaura-seneb.⁶⁸ The statues were found leaning against the western wall of the large hypostyle hall (f) (Figure 9.12). While none of the internal layout recalls any of the usual types of layouts encountered at other sites, the palatial complex remains a very prominent and



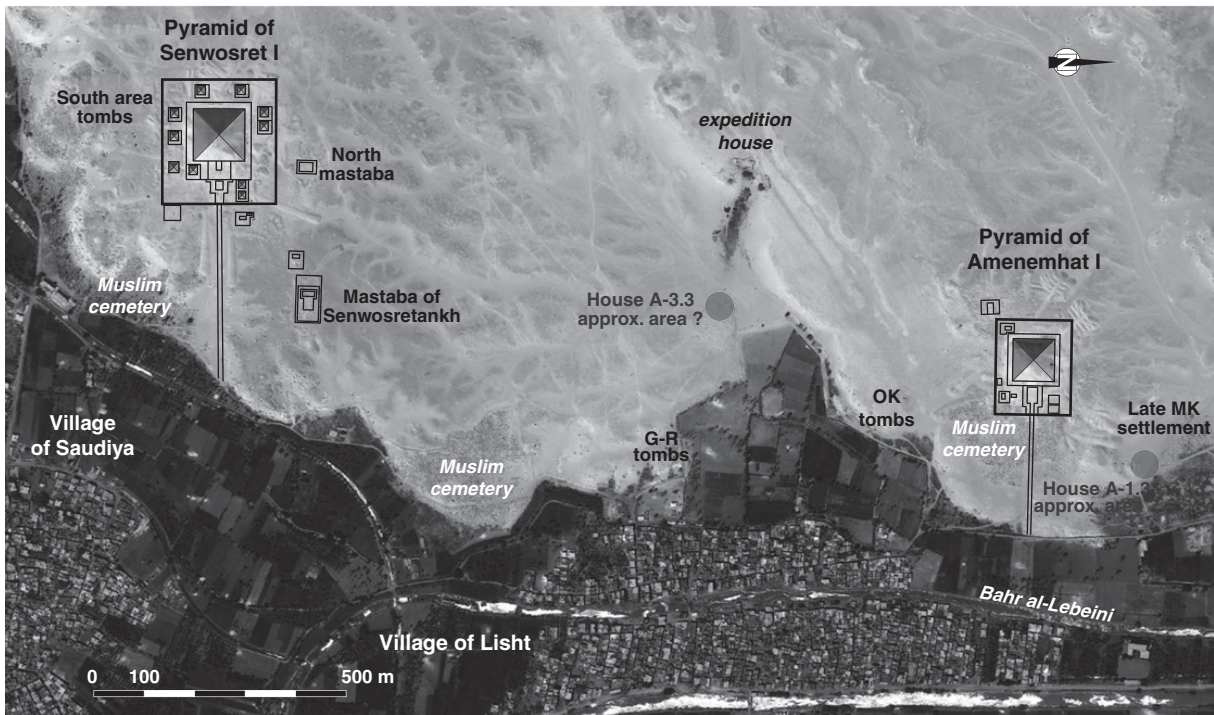
9.16. Middle Kingdom cemetery complex at Tell Basta. After S. Farid, "Preliminary Report on the Excavations of the Antiquities Department at Tell Basta (Season 1961)," *ASAE* 58 (1964), 87, fig. 1.

enigmatic building complex that must have been part of a major city during the Middle Kingdom at Bubastis. The fieldwork recently begun at the site might provide new insights about this complex in the future.

9.4 SETTLEMENT REMAINS AT LISHT-NORTH

Remnants of domestic buildings dating to the late Middle Kingdom have been excavated at the royal necropolis close to the modern village of el-Lisht. The newly founded capital of the Twelfth Dynasty, called Itj-Tawy, might have been located somewhere in this area too, but no concrete archaeological evidence for any major city has been found so far.⁶⁹ Probably the suburbs of the ancient capital extended quite a way along the desert edge where settlement remains have been found close to the pyramid of Amenemhat I (Figure 9.17). Another possibility is that Itj-Tawy never developed into a large urban center and was mainly the location of the principal royal palace during the Twelfth Dynasty.

However, by the Thirteenth Dynasty, some settlement had encroached upon the cemetery area, which might have also been a convenient place to settle for people involved in the upkeep of the royal mortuary cults. The



9.17. Plan of the cemeteries at el-Lisht. By G. Marouard, using Google Earth™, image © 2014 DigitalGlobe, and after Di. Arnold et al., *The Pyramid of Senwosret I, The South Cemeteries of Lisht*, New York 1988, pl. 73.

houses discovered there are well-dated examples of Middle Kingdom domestic buildings and are therefore worth including in this study, especially because at least two houses have been published with complete plans.⁷⁰

9.4.1 House A 1.3

The best-preserved example of a large mud-brick house with residential function is building A 1.3, which is situated along the western side of the pyramid of Amenemhat I (Figure 9.18). It was attached to a large faience workshop.⁷¹ The main entrance of the house lay at about a 4 m distance from the workshop area, which indicates that it might have belonged to the same owner. The principal access from the street led into an entrance room (a) with two doorways, one opening into the interior of the house and the other to a smaller chamber (b) attached to the south of it. The latter contained remains of a fireplace and was possibly used for cooking and food preparation. The other doorway provided access to an L-shaped room or corridor turning south (c) from where another square room was accessible (d). The L-shaped room has been interpreted as a courtyard possibly used as a kitchen and stable.⁷² The only installation here was a small mud-brick bin on the northern side. From a structural point of

view, there is no reason why room (c) could not have been roofed. Its internal measurements of 4.8 m by 3.4 m could have easily supported a ceiling. To the north, another doorway led to a rectangular room (e), which contained remnants of a staircase. This room had to be crossed in order to reach a kind of anteroom (f) fronting the central room of the house (h). The latter is the largest room in the building, measuring approximately 3.8 m by 5.2 m. Two square pillar bases were found here, which supported the roof. This room was not only the largest one of the house and situated in the most prominent position, but it also had traces of painted mud plaster along its sides; traces of paint were also found on the walls of the anteroom (f) (see Figure 9.18). A doorway situated on the northern side of the west wall of room (h) led into a side room that had been equipped with a small bin (i). The distinct layout of this core unit clearly belongs to Group A, Type II-a (Figure 9.1).⁷³ The various rooms and corridors to the eastern and southern sides are additional features that do not have parallels in this form at Tell el-Dab'a, for example.

Over time, additional house units were added against the exterior walls of house A 1.3, making it the central feature of a dense agglomeration of buildings covering about 284 m². One of the newly constructed house units



9.18. House A 1.3 of the 13th Dynasty at el-Lisht. After F. Arnold, “Settlement Remains at Lisht–North,” in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 16, Abb. 4. Courtesy of F. Arnold.

was added against the western side of the initial core house, and a new entrance connected room (i) to a small building with five rooms (k–n) (see [Figure 9.18](#)). The layout of this secondary addition resembles more the type of three-row houses typical for Group B, except that the entrance from the vestibule into the main room of the second row did not lie in the same axis but on the eastern side and was part of a narrow corridor that also gave access to the back room (n), which had traces of a fireplace. A small window was discovered between the back wall of room (m) and the small room in the rear of the building. This might have been used for the circulation of air between the rooms.⁷⁴ Although it is possible to recognize

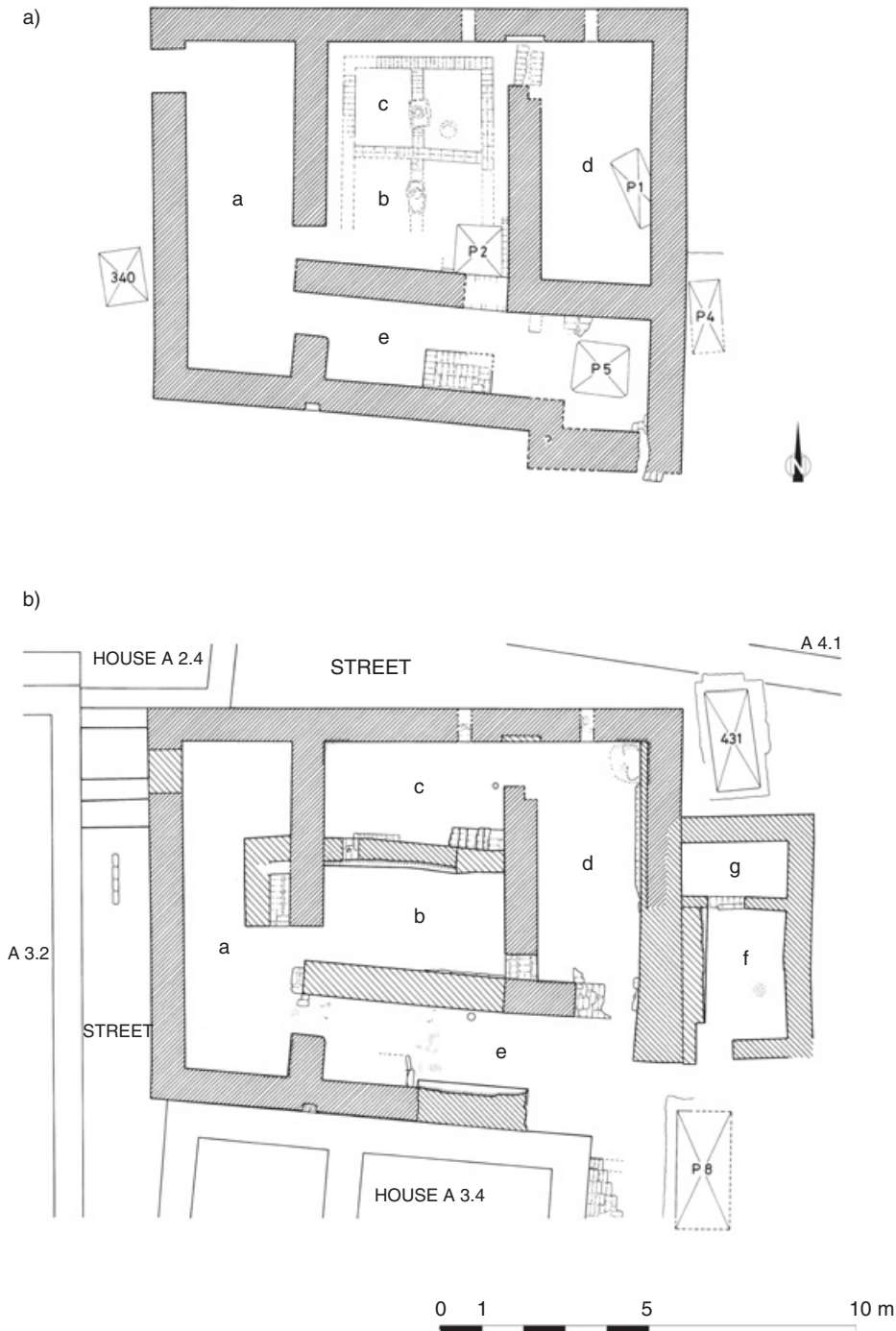
three successive rows in the layout, which identifies this structure as a three-row house (Group B, Type II, [Figure 9.1](#)), it shows a slightly different organization of the doorways than that of the examples known, for instance, from Elephantine ([Figure 9.2](#)).

The second unit, which was added to the core of house A 1.3, lies to its north and had been accessible via a new entrance on the northern side of corridor (e). This new doorway led into a larger room (o) resembling a sort of hall or vestibule, with a smaller room to its western side (p) that had been equipped with a fireplace in the corner and might have functioned as kitchen. These various additions to the core house could have been for people

who were part of the same extended household and follow lines of development similar to those already noted for the late Middle Kingdom/early Second Intermediate Period settlement at Tell el-Dab'a in area F/I (see [Section 9.2](#)).

9.4.2 House A 3.3

The second house (A 3.3; see [Figure 9.19](#)), for which the full plan was retrieved during the excavations, lies to the southwestern side of the pyramid of Amenemhat III



9.19. Development of House A 3.3 of the 13th Dynasty at el-Lisht: (a) Phase 1: initial construction; (b) Phases 2–3: later alterations and additions. After F. Arnold, “Settlement Remains at Lisht-North,” in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 18, Abb. 5. Courtesy of F. Arnold.

(Figure 9.17).⁷⁵ It consists of four rooms and resembles closely the layout of the western addition to house A 1.3 (rooms k–n) (Figure 9.19a). It can be considered a variant of Type III-a within Group B (Figure 9.1) and has a total size of 141 m². A single, broad entrance room or vestibule (a) occupied the first row and gave access through two doorways into the inner parts of the building. One doorway led into the main room (b), which had a four-room cellar unit c below it (see Figure 9.19a). Two holes in the floor indicate that there might have also been two pillars in the center of the room. These square negatives are situated directly above the supporting mud-brick walls of the cellar, which is an important structural observation. A small doorway near the northeastern corner of the main room provided access to the rear room (d). From the entrance room (a), a corridor (e) extended along the entire southern side of the main room (b) and the rear room (d), spanning the full lengths of the second and third rows of the house unit. A small mud-brick platform had been built against the southern wall of corridor (e). Traces of white plaster were found on the walls and on the platform construction.⁷⁶ As for the different functions of the rooms, little evidence remains. The four-room cellar unit c underneath the main room must have been accessible via a trapdoor from this room, but no traces of it have been found.

After a short hiatus and abandonment during which several tomb shafts were dug in this area, house A 3.3 was reused and changed in its layout (see Figure 9.19b).⁷⁷ These alterations date to the Second Intermediate Period, after which the building was probably abandoned relatively quickly.⁷⁸ The quality of construction shows noticeable differences to the earlier building phase, with mud-brick walls being much more irregular and less well finished. The floor levels were raised considerably during this process of rebuilding. The overall layout of house A 3.3 in its second phase still followed the organization of the three-row house type, Group B.

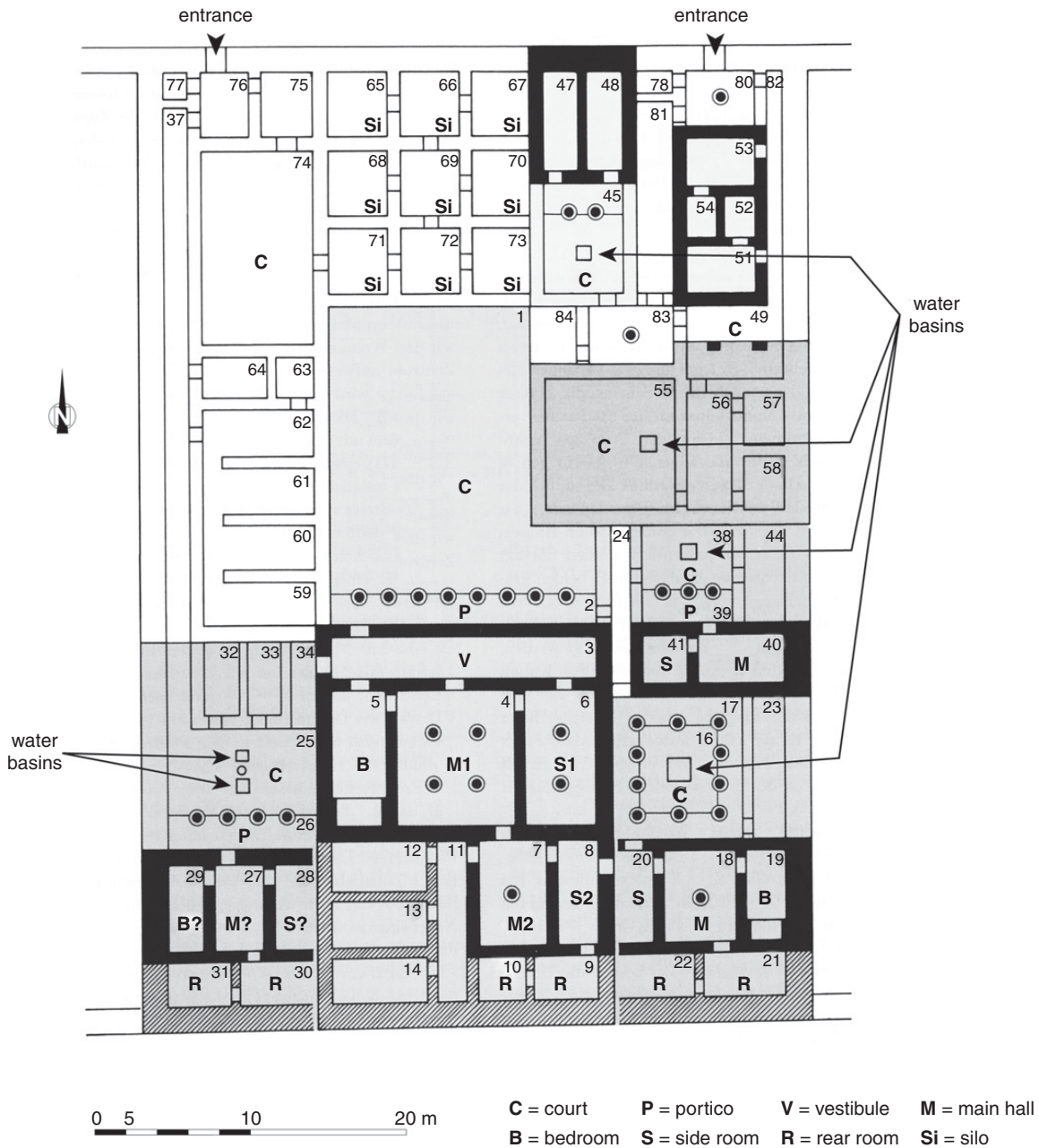
The main entrance was relocated to where the former rear rooms of the building had been and led directly into the corridor (e) from the southeastern corner. This corridor, where formerly the platform had stood, was now equipped with a small stone basin. A deposit of ashes was found here too; the space might have been used for cooking and food preparation.⁷⁹ Another entrance gave access to the former rear room (d), which still remained in connection with the central room, although the latter had been divided into halves (b and c) at this stage, with a new

dividing wall inserted right down the middle. While one half (c) was accessed through room (d) from the new front of the building, the other half (b) was entered via the large rear room (a) from the western side. Remnants of a staircase were found on the eastern wall of room (a), next to the entrance into room (b) (Figure 9.19b). The overall size and the main three rows were kept and adhered to from the older building phase; it is mainly the entrance situation that was reversed. Along the eastern exterior of this house, two small rooms were added (f and g), one showing traces of ash in one of its corners. The objects found within the house indicate that various manufacturing activities had taken place.⁸⁰

Thus, the two examples of late Middle Kingdom domestic buildings from el-Lisht fit relatively well into the general types and house layouts from other sites of the period. Even though the location of these settlement remains are somewhat unusual because they were constructed in the necropolis area close to the royal mortuary complex of Amenemhat I, there is no reason not to consider them as predominantly domestic in character. As mentioned earlier, these buildings might be the result of a wider expansion to the west of the town of el-Lisht even though the latter is still missing from the archaeological record.

9.5 LAHUN: THE LAYOUT OF THE LARGE MANSIONS

The Middle Kingdom town of Lahun, which has been discussed in depth in the [previous chapter](#), is not only one of the best-known ancient Egyptian settlement sites but has also been the object of many analyses and discussions among archaeologists with regard to the layout of its houses, especially the large mansions.⁸¹ Along the northern side of the settlement, a row of seven mansions has been excavated, each house of which follows a very similar layout. South of the main east–west street are situated three further mansions of comparable size and with the same internal plan (see Figure 8.26). In each of these large villas, there are several key elements forming a kind of separate building module. In the center lay the core residential unit, which was linked to a portico in its front and a large open courtyard fronted by a colonnade (Figures 9.20 and 9.21). This central unit within the mansions consisted of three rooms: a central hall, usually equipped with four columns, and two smaller rooms – one on each side of the hall – of which one frequently

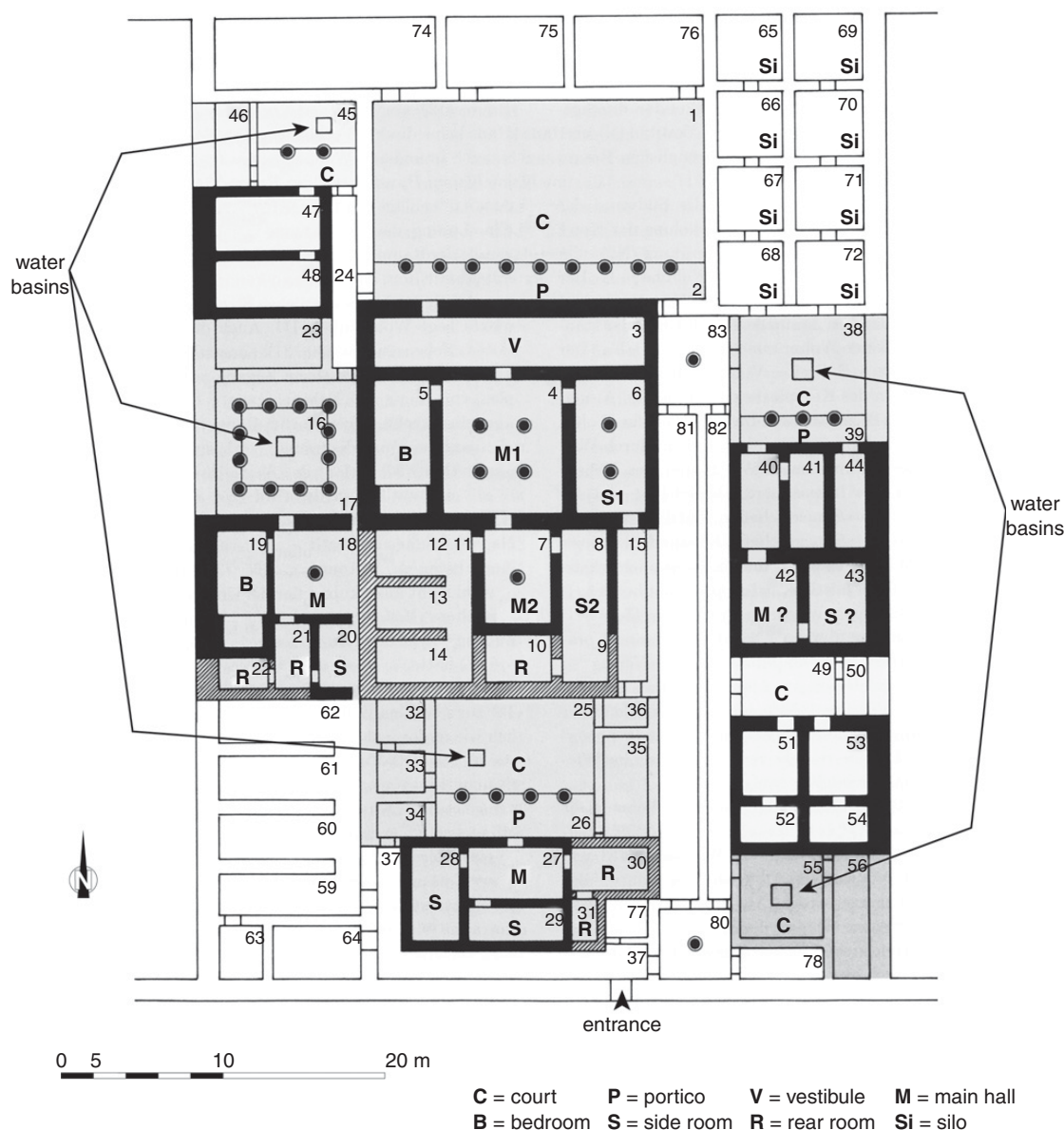


9.20. Mansion 10, southern row of mansions at Lahun. After M. Bietak, "Zum Raumprogramm ägyptischer Wohnhäuser des Mittleren und Neuen Reiches," in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 32, fig. 12. © M. Bietak.

contained a bed niche at the rear and the other was characterized by two columns. This layout belongs to Type VI, the most elaborate form of house layout in Group A (Figure 9.1).

The access pattern through the open courtyard is typical for Lahun but has also been found at Middle Kingdom houses elsewhere. Through the columned portico of the

courtyard, a doorway that did not lie in the main axis of the residential unit, but off to one end, led into a long vestibule, from which direct access could be gained into the main room with the four columns (Figures 9.20 and 9.21). The nonaxial entrance behind the colonnade of the courtyard adhered to the common principle of preventing a direct view into the main residential unit. The main



9.21. Mansion 2, northern row of mansions at Lahun. After M. Bietak, "Zum Raumprogramm ägyptischer Wohnhäuser des Mittleren und Neuen Reiches," in M. Bietak (ed.), *Haus und Palast im alten Ägypten*, Wien 1996, 33, fig. 13. © M. Bietak.

room or hall was equipped with two doors, one on each side, through which the two side rooms could be entered. Another entrance at the rear of the main hall gave access to several rooms; these seem to have contained smaller, additional living units and storage rooms that had been added behind the main core unit. The four-columned hall functioned as the principal room from which all the areas of the main core residence in the center of the mansion could be reached (see Figures 9.20 and 9.21). Each of the large mansions also contained a granary block

(Figure 9.20, nos. 65–73) with square storage compartments as well as a row of rectangular magazines (Figure 9.20, nos. 59–62). Interestingly, the granary complex in the southern row of mansions is always located close to the main street. For the northern row of mansions at Lahun, the granaries were abutting the northern stretch of the perimeter wall. These locations mainly related to practical considerations for filling and emptying the grain bins. In addition, with regard to the overall layout of these large buildings, it is evident that each mansion could have

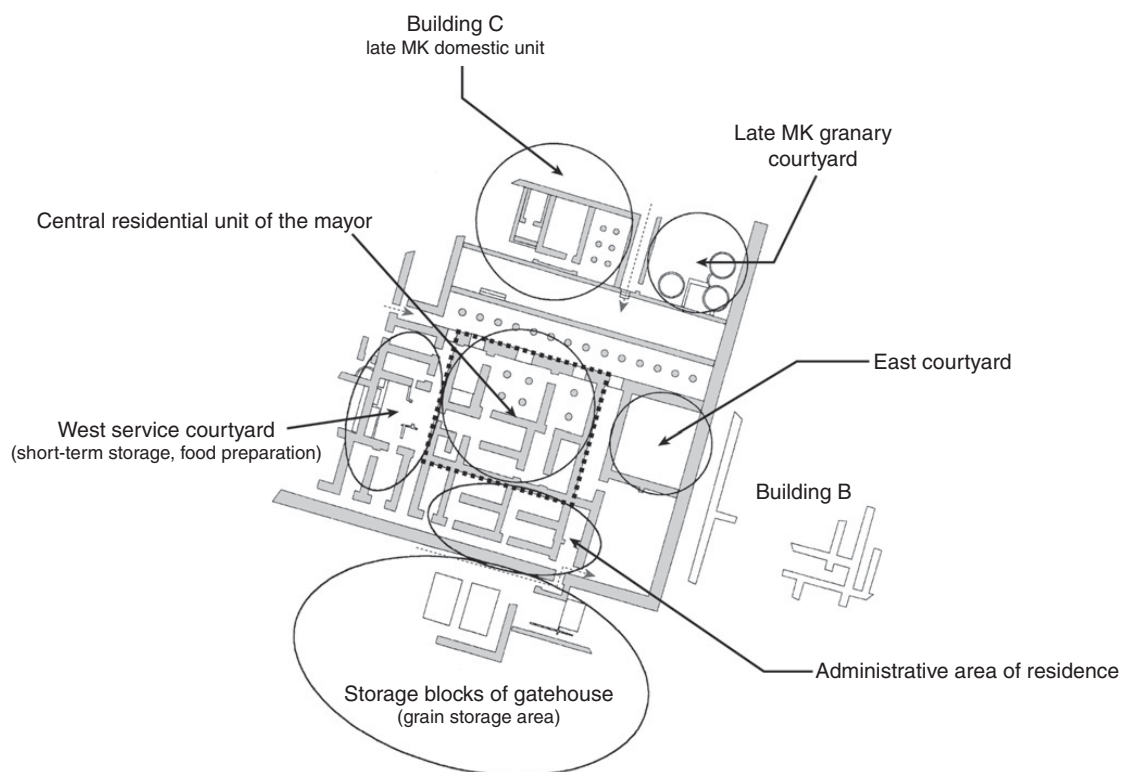
functioned as a discrete economic unit within the wider settlement.

In fact, each mansion at Lahun functioned as a kind of microcosmos with several smaller residential units arranged around the largest unit in the center of the building complex. All these units can be easily recognized by the repeated pattern in the organization of the internal rooms, which consistently adheres to the principles of Group A layouts: one larger room in the middle that is flanked by one or two rooms at the sides and also has further rooms to the rear. In each of the large mansions, at least one of these additional residential units was fronted by a small peristyle court with a water basin in its center (see [Figures 9.20](#) and [9.21](#)). Although it is not clear whether all these building modules were strictly residential – as some could have been for storage or administrative activities (see [Figures 9.20](#) and [9.21](#)) – the general layout of the Lahun mansions reflects the presence of extended families, possibly including staff members, as the main inhabitants. The large size of these mansions could easily accommodate sizeable households, which would have included not only the core family but also additional staff and possibly servants.⁸² What is less clear at Lahun is the relationship between the inhabitants of the large mansions and the smaller houses that were situated in the immediate vicinity within the eastern portion of the settlement – for example, those next to the southern row of mansions, which even shared common walls. From Petrie's plan of the site, it can be seen that some of the small houses were constructed directly against the outer walls of the mansions ([Figure 8.26](#)). The big difference between the size of those large mansions, which cover more than 2,400 m², and the smaller houses at Lahun, which range from 150 m² to 40 m², is striking and provides an interesting insight into the social complexity of a state-founded settlement. Even though the plans of the smaller houses are much less detailed on Petrie's general plan of Lahun, it is nevertheless possible to recognize the common layout of the three rooms (central room flanked by two side rooms) in the center of the smaller ones ([Figure 8.26](#)). The remarkable difference in size between the mansions and the small houses has been commented on by Kemp, who sees this as a sign of an extreme social divide, whereas, in comparison, the layout of the residential quarters at Tell el-Amarna seems to indicate more of a social gradient.⁸³

9.6 WAH-SUT: THE GOVERNOR'S RESIDENCE (BUILDING A)

Another close parallel to the large Lahun mansions has been excavated at the site of Wah-Sut in South Abydos. Building A, which has been identified as the mayor's residence by the sigillographic evidence, is the most prominent building of the settlement, being situated on the southwest corner of the town and at a short distance from the royal mortuary temple complex ([Figures 8.29](#) and [8.30](#)). It covers an impressive area of 4,346 m². As has been outlined in much detail in the [previous chapter](#), this large building complex consists of multiple elements and building units, which saw several phases of restructuring. The key elements of the internal layout – such as the main residence, storage installations, and a large court fronted by a colonnade – are also recognizable at Wah-Sut and are even similar in size and proportions in comparison with Lahun ([Figure 9.23](#)). A large courtyard with a columned portico gave access into a long vestibule, which had been furnished with a line of columns and through which the central residential unit was accessed ([Figure 9.22](#)). The core unit shows close parallels to the Lahun mansions and belongs to the Middle Kingdom house Type VI of Group A ([Figure 9.1](#)). The central room or reception hall (M) is of a square shape and was equipped with four columns. A smaller side room with a bed niche (B) was located to the western side, while another side room (S) flanked the central hall on the east and had been equipped with two columns ([Figure 9.24](#)). Several further rooms lay at the rear of the main unit and were accessible through the central hall (M). During the excavations, two service areas consisting of additional rooms, courtyards, and magazines were found on either side of the core unit as well as behind it (R and C, [Figure 9.24](#)). The residential function of Building A is beyond doubt, but this building served more purposes than home to the local mayor. The archaeological evidence revealed that it played a major administrative and economic role within the settlement, which is witnessed by the large amounts of clay sealings that were found in trash deposits along the exterior walls of the building complex. Various storage installations, including a granary block, can be seen to the western side of the large courtyard ([Figure 8.31](#)).

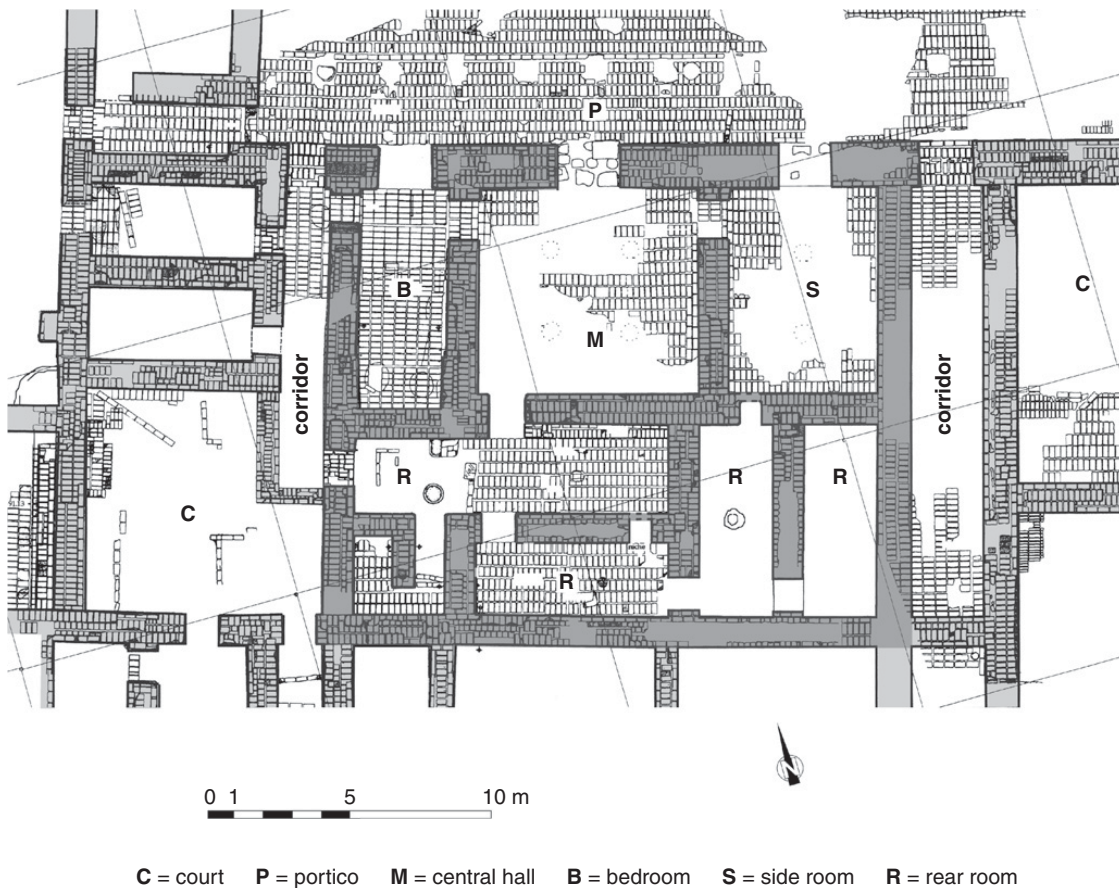
Other buildings at the settlement of Wah-Sut that are situated to the east of Building A are smaller than the mansions at Lahun but were built according to the same principles as the residential core unit of Building A ([Figure 9.23](#)). They have a size of about 900 m² but



9.22. Internal layout and room functions of Building A, settlement of Wah-Sut at South Abydos. After J. Wegner, "Excavations at the Town of Enduring-Are-the-Places-of-Khakaure-Maa-Kheru-in-Abydos. A Preliminary Report on the 1994 and 1997 seasons," *JARCE* 35 (1998), 22, fig. 11. © J. Wegner.



9.23. Comparison between Buildings A and D at Wah-Sut and the large mansion and smaller houses at Lahun. After J. Wegner, "The Town of Wah-Sut at South Abydos: 1999 Excavations," *MDAIK* 57 (2001), 289, fig. 5. © J. Wegner.



9.24. Layout of the central core residence and adjacent areas of Building A at Wah-Sut. By G. Marouard, after J. Wegner, "Excavations at the Town of Enduring-Are-the-Places-of-Khakaure-Maa-Kheru-in-Abydos. A Preliminary Report on the 1994 and 1997 Seasons," *JARCE* 35 (1998), 11, fig. 6. © J. Wegner.

contain the same elements as the larger houses (Lahun mansions and Building A), such as the open courtyard with a colonnade providing access to the tripartite central room unit and some additional rooms situated toward the back. Storage facilities were present in the form of square and rectangular magazines. Up to now, there has been no archaeological evidence for any of the smaller houses at this site similar to those at Lahun. From a town planning perspective, both Wah-Sut and Lahun have been conceptualized according to the same principles, which were typical for the Middle Kingdom, at least in the northern part of Egypt. Wah-Sut is currently the southernmost site where the layout of a tripartite core unit has been attested for elite buildings. This would further confirm that the officials in charge of the planning stages of this settlement were part of the central government situated at Itj-Tawy or Memphis and applied a comparable concept as can be seen at Lahun for this town in the south. To what extent any of the future inhabitants – for example, the mayor – had

a say in the planning remains speculative. The secondary additions and changes observed in Building A over time were certainly the initiatives taken by the inhabitants themselves; most likely by the respective mayor. The transfer of high officials from the capital or royal residence who were put in charge of such a newly founded townsite is very likely, and this close connection might be further confirmed by the fact that by the late Middle Kingdom a king's daughter and noblewoman called Reniseneb was married to a mayor at Wah-Sut and assigned a new residence where the former granary unit once stood.⁸⁴

9.7 THE LAYOUT OF DOMESTIC BUILDINGS AT ELEPHANTINE

Cornelius von Pilgrim, who has been in charge of the excavation of the Middle Kingdom settlement remains at Elephantine, presents a detailed analysis of the house types

encountered at the site and has established a general site-specific typology.⁸⁵ He identifies two principal types of domestic houses that occur most frequently on the island: the so-called three-row house and the courtyard house. The three-row house (*Dreistreifenhaus*) is a layout typical for midsize domestic buildings that have in common an internal arrangement of rooms organized in three consecutive rows (Figure 9.25). They can be assigned to the house types of Group B, Types II and III, after Bietak and Müller (see Figure 9.1).⁸⁶ The layout has a marked hierarchy in terms of the different functions of rooms, with the most private rooms being the least accessible at the back of the house, in the third row from the entrance. The houses at Elephantine that can be assigned to this house type have a size between 40 m² and 100 m². The internal arrangement of the rooms according to the principal of three consecutive rows does not always follow a strictly uniform pattern, and there are many variations, especially in the location of the doorways, showing the absence of uniform access patterns (Figure 9.25). The main entrance from the street led into a small vestibule or entrance room, which was part of the first row that also included a small oven room functioning as the kitchen. The latter is easily recognizable in the archaeological record due to the blackened walls from the fire and thick ash deposits. This room was almost always located in northern corner of the first row (Figure 9.25).⁸⁷

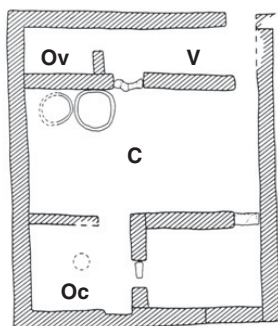
The main room consists of a large hall situated in the center of the building and usually took the place of the entire width of the second row. This was the largest room and always showed signs of multiple activities having been carried out here, from food production and preparation to manufacturing activities, and it was probably also used for sleeping.⁸⁸ Evidence for small fireplaces has been noted on the mud floors.⁸⁹ The main room was frequently equipped with pillars that were sometimes necessary for supporting the roof, but not always, and therefore they could also have been a decorative or organizational element. It is quite likely that the columns were considered a kind of status symbol; this is especially noticeable from the fact that in some instances the small entry rooms also were equipped with a single column, where the feature did not have a strictly structural function. From an architectural point of view, additional support for the ceiling by pillars or columns was only required for rooms that were wider than 3.80 m to 4.00 m.⁹⁰ A staircase probably leading to the roof has been discovered in two of the excavated houses (H70 and H93; see Figure 9.25). In both cases, the stairway was

built against one of the sides of the central room.⁹¹ It is not possible to reconstruct whether the stairs led to the roof or to a second floor with additional rooms. The former option seems more likely because there is no clear evidence for any of the elements usually linked to the presence of multiple floors, such as thicker walls on the ground floor (1 m or more), fallen elements in terms of colored plaster fragments, or small column bases that could have originated from a collapse of such upper floors.⁹²

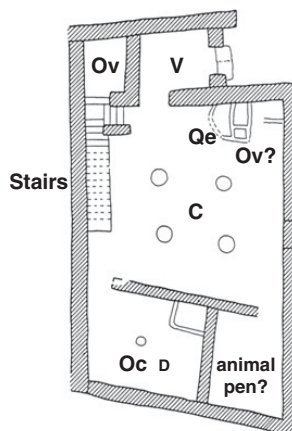
The concept of separate “bedrooms” used only for sleeping did not seem to have existed in these smaller houses at Elephantine, and it appears that sleeping occurred wherever it would have been deemed appropriate and comfortable – probably on mats that could be rolled up when not needed.⁹³ None of the houses contained any rooms with bed niches that could have been interpreted as bedrooms, a prominent feature of different residential units at Lahun, Wah-Sut, and also Tell el-Dab’a (see earlier in this chapter).

In the third row to the back of the house lay two smaller rooms, one of which has frequently been used to keep animals, as can be witnessed by the presence of animal dung. These have been assigned as the least accessible rooms and therefore of a more private nature, although the evidence for the presence of animals in the house needs to be considered in this respect and to some extent questions the “private” nature of this space. From the archaeological evidence there is no indication for any specifically assigned functions for these back rooms.

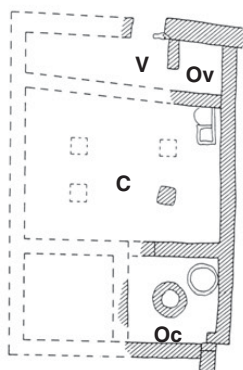
The second major house type at Elephantine has been named “courtyard house” (*Hofhaus*) by von Pilgrim according to its most characteristic element, which is a large open court in the center of house surrounded by additional rooms that were all accessed from the courtyard and grouped around its four sides (Figure 9.26). This type of house was usually larger in its floor plan, covering between 100 m² and 230 m². Although there are some examples that had rooms only on two sides of the court, those were always at a right angle to each other, unlike the three-row houses where the arrangement of rooms follows a parallel zoning.⁹⁴ The courtyard was an integral part of the building and was used as the main activity area. In some cases it has been difficult to make a clear distinction as to whether the central court was in fact a central hall with a roof, which can only be determined according to architectural details such as size and the presence of additional structural features such as columns. The thickness of walls for supporting roof beams that would have



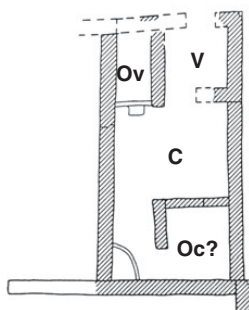
a) H 53 - Phase 12



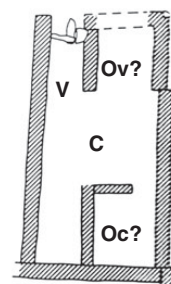
b) H 70 - Phase 13



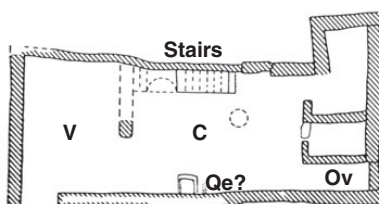
c) H 14 - Phase XIII



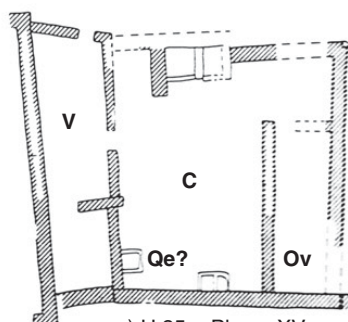
d) H 12 - Phase XIII



e) H 23 - Phase XIV



f) H 93b - Phase 14

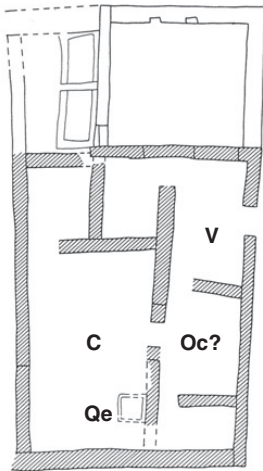


g) H 25a - Phase XV

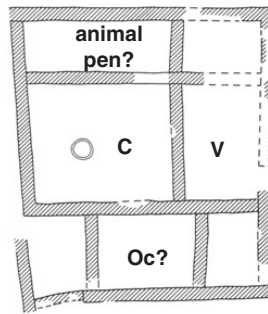


V = vestibule
C = court/hall
Oc = one columned room
Ov = oven room
Qe = quern emplacement

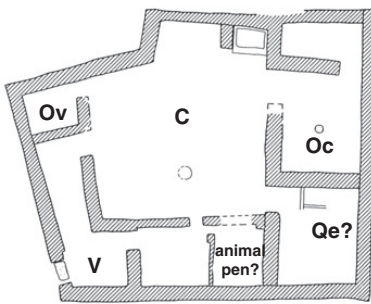
9.25. Different examples of “three-row” houses at Elephantine. After C. von Pilgrim, *Elephantine XVIII: Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, AV 91, 1996, 191, Abb. 81. Courtesy of C. von Pilgrim.



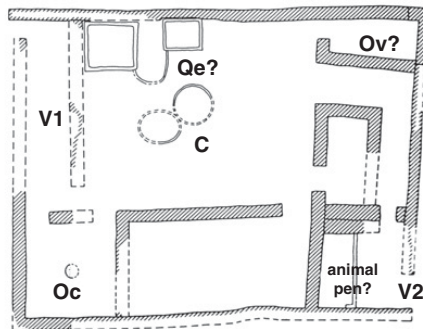
a) H 80 - Phase 11



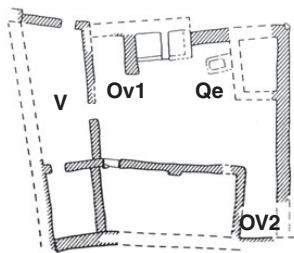
b) H 10 - Phase XII



a) H 69 - Phase 13



d) H 86b - Phase 14



a) H 25b - Phase XV

V = vestibule
C = court/hall
Oc = one columned room
Ov = oven room
Qe = quern emplacement

0 1 5 10 m

9.26. Courtyard houses at Elephantine. After C. von Pilgrim, *Elephantine XVIII: Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, AV 91, 1996, 197, Abb. 85. Courtesy of C. von Pilgrim.

covered a hall can also be helpful for making a better distinction.⁹⁵ The main entrance into a courtyard house from the street led first into a vestibule, from which a corridor usually gave access to the central interior space. Any direct access and visibility into this part of the building was thus avoided (Figure 9.26). The second room that was entered after the vestibule frequently had been

equipped with a single column (Oc; see Figure 9.26). The most characteristic feature of this house type is that all rooms had a doorway connecting them directly to the central court.

In terms of room functions, there was always a small room being used as the “oven room” (Ov) and kitchen that had the same function as in the three-row houses and

was also situated on the northern side. In some cases one of the rooms close to the main entrance, or in one case next to a secondary rear entrance (see H86, Figure 9.26), was used for keeping animals. The courtyard was often equipped with smaller storage installations such as silos or square bins and showed the same multifunctionality as has already been observed for the three-row houses. Further evidence for food production, such as quern emplacements and fireplaces, was found in the central part of the house too.

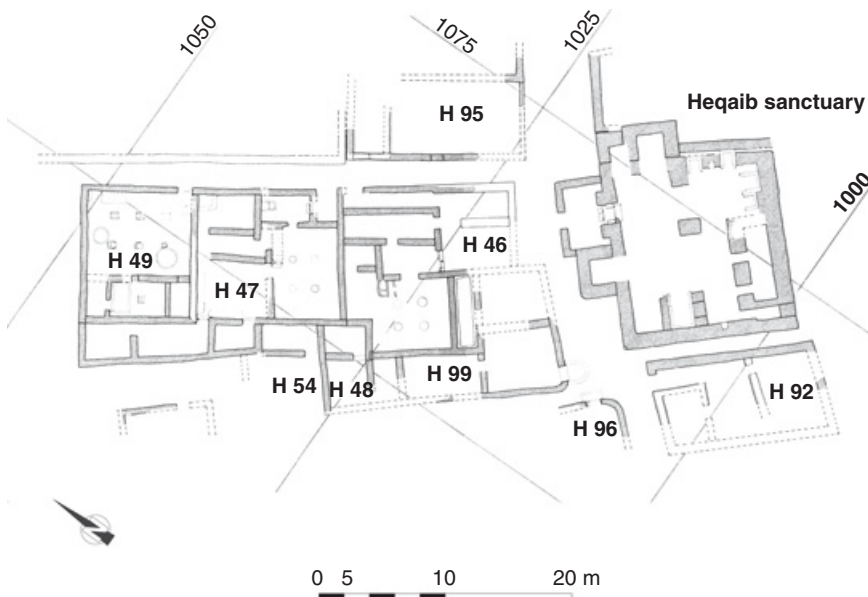
Thus, the two main types of domestic houses at Elephantine show many parallels in terms of room function and use – the main difference being the scale of the buildings and the arrangements of rooms according to parallel zones – in the three-row houses or in the form of multiple rooms built around a central courtyard. However, there are also houses that do not fit into these two categories but are also characterized by a central hall (Figure 9.27).⁹⁶ This layout is exhibited by several houses (H46–49) and seems to be related to the restrictions in available space on the building plot. Each of these houses has either a court (H47) or a hall with columns as a central feature (H46, H49), but the rooms are grouped in a more irregular fashion around it. In total, only five houses at Elephantine have been excavated that can be characterized as courtyard houses as defined above and about nine houses that belong to the type of three-row houses.⁹⁷ It is also remarkable that

there does not seem to be a chronological distinction for the presence of these two house types, as they occur in all the different phases of the settlement from the early Middle Kingdom until the Second Intermediate Period.⁹⁸ In conclusion, it seems to be more adequate to see the presence of a central court or hall as the main feature of domestic houses in Elephantine dating from the Middle Kingdom to the Second Intermediate Period.

9.8 CONCLUDING REMARKS

The currently available archaeological evidence from the northern parts of the country, especially from Tell el-Dab'a, shows significant differences to the domestic buildings in the south of Egypt. Perhaps any direct comparison between Elephantine and the preplanned elite houses at Wah-Sut and Lahun should be avoided, for several reasons. Apart from the possibility that the general social groups of the inhabitants might have been different, it is also important to remember that the latter are state-founded settlements that probably involved less of a personal choice by the local inhabitants for the initial layout of the domestic buildings.

The topography and the climate zones in which these settlements occur also need to be factored into any wider intersite comparison. Elephantine is a tell site located on an island with restricted space in the First Cataract region and developed in an “organic” fashion, whereas the other



9.27. Houses of the 17th Dynasty (Phase 11) at Elephantine. After C. von Pilgrim, *Elephantine XVIII: Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, AV 91, 1996, 255, Abb. 108. Courtesy of C. von Pilgrim.

sites analyzed in this chapter were situated further to the north and along the desert edge or located in parts of the eastern Nile Delta. Precipitation patterns in the south are markedly different from those of the Delta region, for example, where some rainfall occurs during the winter months. The overall lack of available data from residential quarters of towns in Upper Egypt other than Elephantine is certainly a problem in this respect too. The governor's residence and administrative complex at Tell Edfu, for example, should also be considered here. Even though only three elements of this building have been excavated – two columned halls and an elongated room (Figure 8.45) – it is possible to observe that architectural parallels for this building cannot be found either at Wah-Sut and Lahun or at Tell el-Dab'a. Such columned halls were part of administrative buildings but also palatial structures. Currently, the closest parallel to the building at Edfu is the “command building” at the fortress of Buhen in Lower Nubia, and some similarities can also be recognized at the “campaign palace” compound close to the fort of Uronarti (Figures 8.34 and 8.37) and even within the exposed zones of Middle Kingdom settlement remains to the east of the Sacred Lake at Karnak (Figure 8.39). This would be a first indication for the existence of a second type of architecture for palatial and administrative buildings in Upper Egypt and Lower Nubia, which were markedly different from those sites farther to the north. Of course, this is only a first tentative evaluation, and more evidence is needed to fully understand the architectural layout in relation to regional aspects and local traditions.

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Final Conclusions

THE ANALYSIS AND DISCUSSION OF THE ARCHAEOLOGICAL EVIDENCE FOR SETTLEMENTS in Egypt dating from the fourth millennium BCE into the second millennium BCE provide a new basis for any further research concerning the urban fabric of this ancient culture. The empirical foundation of physical remains also allows for developing a working model for what constitutes urbanism in ancient Egypt. The framework of an attempted typology, as presented in [Chapter 1](#), is a useful starting point from which to investigate the archaeological data from excavated sites and helps to broadly categorize the available evidence. It is important to emphasize that such a typology has its weaknesses and does not capture all the facets of the different kinds of settlements and in addition shows a certain degree of overlap. Such a typology does not really encompass the essence of the urban fabric but only provides some general guidelines.

The various settlements analyzed in this study provide good evidence for the emergence of an urban society already by the end of the Predynastic and the transition to the Early Dynastic Period. In this respect, the site of Hierakonpolis is an ideal example of the long-term evolution of a settlement through various phases of the pre-Pharaonic past, which see the emergence of complex society with a distinct elite at the top of the hierarchy, large communal production facilities and craft specialization, and the gradual densification of settlement moving closer to the floodplain. By the Early Dynastic Period, the town of Hierakonpolis had formed a tell site within the floodplain, surrounded by a town wall and containing an important administrative center or palatial complex and a local temple. As can be demonstrated through the analysis of the archaeological evidence, Egypt is marked by the gradual evolution of urban society from this early time onward.

One of the main challenges has been the lack of evidence for villages and hamlets in the Nile Valley and Delta, which basically means that the smallest entities of the settlement system remain relatively hidden – unless we include the smallest state-planned installations within this category. It is evidently problematic to evaluate

Egypt as a village society when such sites are almost invisible in the archaeological data. The various towns located in the floodplain, which have been investigated from the Old through the Middle Kingdoms, show a relatively high degree of continuity – one of the typical features of the settlement system in Egypt. As tell sites developed in advantageous locations, they often saw a long-term and overall stable occupation that could last several millennia. The settlement system in Egypt is quite unusual in that it includes not only towns situated within easy reach of the river but also important agglomerations, such as the towns of Abydos or Zawiet Sultan/Zawiet el-Meitin, founded along the desert edge. The local topography and the peculiarities of the natural environment, dominated by the phenomenon of the perennial Nile flood, certainly had a significant impact on the physical layout and the development of towns and cities as a whole and provided some restraints. In terms of the overall stability noticeable within the settlement system, Egypt differs quite distinctly from its neighbors. For example, in the southern Levant, many more fluctuations in the settlement system have been noted.¹

Furthermore, Egypt's towns and cities are not characterized by stretching over vast areas but remain throughout the

Pharaonic period relatively constant and small, ranging from 3 ha to 12 ha. Their less impressive size has been one of the reasons that their urban character has been questioned in the past.² The numerous examples analyzed within the current study, however, demonstrate quite clearly the presence of urban characteristics. These are seen in the existence of architectural features that mark an urban site, such as the presence of temples and sanctuaries, elaborate elite buildings and residential quarters with houses of a variety of sizes, and a town wall, as well as production and manufacturing zones. The architectural dimension is the most easily recognizable element of the available archaeological material. Evidence related to the social complexity of the inhabitants is more difficult to address without a bias toward the higher levels of society, which left textual records.

The way the towns and cities were organized and the layout of domestic architectures indicate a certain level of social variation. This can be confirmed by the evidence for closely knit communities whose houses were built in an agglutinated fashion sharing common walls even though their social standings were quite diverse. The most easily recognizable case in this respect is Lahun, where a multitude of small houses directly abutted the walls of the southern row of mansions (Figure 8.26). If there is one element that is most characteristic for urban society throughout the investigated time frame, it is this “interconnectedness.” This has often made the identification of the individual houses or house units difficult, as there were connecting entrances and in some cases very informal-looking passages that led up to the entrances (for example, Figures 8.42, 9.6, and 9.9). By the New Kingdom, domestic architecture and house layouts had evolved into more-individual buildings, showing a little more separation in terms of spatial organization, but in some communities people still shared facilities and built houses in an agglutinated fashion. Both phenomena can even be found within the same town – for example, in the New Kingdom city of Amarna.³ Settlement density could change considerably, as has been observed at Tell el-Dab’a during the late Middle Kingdom into the Second Intermediate Period, when enough space was available for people to settle more freely (Figures 9.6 to 9.9). Furthermore, it would be incorrect to simply equate house sizes with the social standings of the inhabitants.⁴ The social spectrum to which the inhabitants of towns belonged can tentatively be inferred from architectural details, as these often remain the only information still available to us today. In some cases, these details have been taken to quite an extreme, as was outlined for the Middle Kingdom town of Lahun, but because this is a

state-founded town, could it not be more a vision of its planners than reflecting a common phenomenon? Evidence for a certain degree of social hierarchies can also be observed at the town of Elephantine during the Middle Kingdom. However, there was no such strict spatial division of large mansions in one part of the town and much smaller houses in the remainder, as at Lahun. House sizes in general seem to follow a much more graded profile in the former in comparison with the latter site. This does not necessarily mean that the inhabitants in Elephantine and Lahun were entirely dissimilar in terms of social hierarchies but this is difficult to assess with much certainty based on the current archaeological and textual evidence. Elephantine evolved over a long period of time from its foundations during the Early Dynastic Period, in contrast to Lahun, which might be better characterized as a model town that was conceptualized by officials closely associated with the royal court.

Also noteworthy is that the more unstable settlements in Egypt are the state foundations, which never achieved the same continuity in occupation as other places did. There is of course some logic to this, because state-founded settlements were much more dependent on the central government than any regular town in the floodplain and Delta. Difficulties in the royal succession and political instability seem to have had much more lasting effects on the former. Other kinds of state foundations, such as workers’ and production sites, were simply abandoned once their primary purpose ceased – which is very well illustrated in the case of Heit el-Ghurab at Giza.

On the other side of the spectrum, the evidence from Abydos or Tell Edfu demonstrates that at the regional urban centers in the floodplain, the political and economic crises cannot easily be seen in the physical remains of these towns. Those events might be recognizable as phases of abandonment, expansion, or decline within a settlement, in addition to changes in the quality and size of domestic housing, but those indications are much harder to detect when only a small portion of a site is accessible. As mentioned earlier, one of the best-known examples of the long-term development of a settlement is the site of Tell el-Dab’a, which has been intensely investigated over a considerable area. Some fluctuations in the settlement of different parts of the town of Tell el-Dab’a have been recorded and are marked as phases of expansion and abandonment (see Table 8.2). But only a few sites have such a detailed record of excavated remains, which means that the case of Tell el-Dab’a is still rather the exception than the norm, and additional factors play a

role here, such as the influx of foreign settlers that might also have influenced this town's very dynamic evolution.

10.1 THE ROLE OF TOWN PLANNING

Another Egypt-specific feature concerning settlements is the important role of town planning by the state, which is on a scale unparalleled elsewhere in the ancient Near East. From the Old Kingdom onward, the central government, dominated by the king and his court, took a deep interest in settling communities in places where they would serve the overall aims of the state. It is also evident that this policy of "town planning" was mainly pursued in relation to royal building projects, the upkeep and long-term support of royal mortuary cults, and the exploitation of natural resources and agriculturally rich regions. This shows that the state had no interest *per se* in founding settlements, but instead used this approach as a means of efficiently pursuing some of its political, ritual, and economic interests.

As mentioned previously, this intervention of the central government is only visible during times of strong political centralization – for example, during the Old and Middle Kingdoms – and has in most cases been absent at times marked by the disintegration of the administrative system and central political control, which can be witnessed during the First Intermediate Period and the beginning of the Second Intermediate Period. In addition, communities living in state-planned settlements did not persist in living at such sites without the political and socioeconomic framework that had been supporting them. None of the state foundations seems to have ever evolved into a permanent settlement or tell site, even if there are cases in which several generations of inhabitants can be recognized sometimes encompassing up to 200 years of occupation. This situation indicates that these environments, in which state foundations usually appeared, were not considered advantageous in their own right but functioned well only within the administrative and economic network that had been established and was controlled by the central government. This also means that a part of the subsistence and income of the town's inhabitants was provided by the central authorities. For the Old Kingdom, this financial basis would have been in the form of agricultural land and royal domains that provided for these communities. For the Middle Kingdom, a similar system seems to have been in place.

These state foundations offer a glimpse of what was considered necessary and adequate for the foundation of a

town in order to settle a community. Closely related to this is the concept of creating a kind of module that was repeated as many times as necessary.⁵ Such an abstraction of a building unit seems also to be unique to Egypt, and its origins can be traced back as far as the Fourth Dynasty, when the mortuary settlement of Queen Khentkawes was created using a repetitive house model in orthogonal layout that characterized that site.

Also striking is the large variety of state-founded settlements – with regard to their respective sizes, layouts, and varying degrees of complexity – which range from small and simple nonurban settlements (e.g., the Western Settlement at Qasr el-Sagha or the first installations at Tell el-Dab'a) on one end of the spectrum to elaborate towns (such as Lahun and Wah-Sut) at the other. Not all of them can be considered urban, but they are also not really part of a village horizon either, because their origin and dependency on the state is evident in all these cases, going against what a rural society and rural types of settlement stand for.⁶ Although these elements were certainly also parts of ancient Egyptian society during all time periods, the occupants of the planned settlements need to be considered as part of a complex urban society. It might even be possible to postulate that the extent of settlement planning and the creation of new foundations by the state would not have been feasible without the existence of an urban society. If Egypt had been essentially a village society, as has been proposed by several scholars,⁷ the conceptualization and intellectual processes necessary for the foundation of settlements, in a rather abstract way that can be witnessed at the pre-planned sites, would hardly have been feasible. It necessitates the experience of different forms of settlement in order to choose the model that fits best with the anticipated function corresponding to the social structure of the intended inhabitants. The different examples of state-planned settlements that appeared during the Old Kingdom and especially during the Middle Kingdom can be considered abstract forms of settlements or abstract elements of "naturally developed" settlements that existed at the time. This also explains the variety in layout that is encountered. For example, the more barrack-style buildings at the Western Settlement of Qasr el-Sagha and the village-like houses in the two preplanned settlements at Tell el-Dab'a are prime examples of the use of what were considered adequate models for the purpose of the respective sites. The case of Tell el-Dab'a is especially interesting because the first

attempt to settle in area F/I was not met with much success by the inhabitants, who almost immediately changed the internal layout of their new homes and did not stay there for very long. It can also be observed that repetitive house layouts within such settlements do not necessarily mean that they were conceived primarily for a homogeneous social group of people or the same segment of society. If deemed appropriate, different social hierarchies could easily be accommodated at a planned townsite by allowing for a variety of house sizes – seen at Lahun and Wah-Sut as well as at Heit el-Ghurab, where the presence of high officials and their families but also lower ranks of society were part of the same town. Another missing element in this respect is the furnishings of individual houses, which could have differed considerably according to personal income and wealth. The way the ancient Egyptians conceptualized settlements and their layouts provides an interesting self-reflection and perception of their society from a top-down point of view.

As mentioned earlier, it is to some extent ironic that as far as the archaeological record is concerned, a preponderance of planned settlements is noticeable, while the most basic kinds of agglomerations such as villages and hamlets are lacking. As can be clearly demonstrated, the factors of archaeological preservation in the Nile Valley and Delta region, in addition to movements of the Nile River, have had a severe impact on the survival and accessibility of settlement remains in general and are mainly to be blamed for the uneven distribution of the current evidence.

10.2 URBANISM IN ANCIENT EGYPT

Because size and population numbers cannot be reliably applied to any discussion about urbanism in ancient Egypt, the main criteria for what can be considered an “urban” settlement are based on the role and function of the particular town, including the presence of various institutions – a much more effective approach than one based on quantitative criteria, under the given circumstances. Several urban forms with different foci can be noted for the periods under discussion:

1. Towns and cities with a primarily **ritual and religious focus**; those frequently also including a cult for the king, which is, for example, the case of ancient Thebes/Karnak, Abydos, Wah-Sut, and probably also sites such as Heliopolis, for which little archaeological data has survived.⁸

2. **Administrative centers**, which would be the case of the national capital at different periods of time, though there is some indication that Memphis and also nome capitals (for example, Tell Edfu, Abydos, Dendera) located in the provinces had this function through most of Pharaonic history.
3. **Trading centers**, for which the growing late Middle Kingdom city at Tell el-Dab’a is a good example, are also present and might have also included the town of Elephantine, along the southern border close to Lower Nubia. This latter town has repeatedly been mentioned in textual sources in connection with royal expeditions going south. The town at Ayn el-Gazzareen in the Dakhla Oasis might be another good example of such a center.

There is no evidence that the general layout would have necessarily been different for these categories, nor is there any evidence for such cities having functioned solely for one purpose. These three categories merely indicate one of the principal functions in their existence.⁹ The layout of an urban site in Egypt depended much on the local topography but usually contained a common group of elements that would classify it as urban – such as enclosure walls, temples, administrative complexes including governor’s palaces, and manufacturing/production facilities as well as communal and official storage installations, in addition to the residential quarters and a nearby cemetery. It is rarely possible to identify all of these elements at a given site for a single period of occupation, which in most cases depends on the preservation and accessibility of the archaeological evidence. Thus, the presence of different institutions in addition to a socially diverse population should be considered the more poignant markers for urbanism in contrast to the size of a settlement and the population numbers or density. Especially population density can vary greatly between tell sites and those founded along the desert edge. This is therefore not an independent variable that can be used for defining urbanism in ancient Egypt but one that might be useful in conjunction with other criteria.

Another characteristic of urban forms that can be recognized from the archaeological data is the agglutinated organization of buildings, where houses share common walls and even entrances that make a definition of exact house limits difficult. The majority of inhabitants formed closely interconnected communities, which can be observed in both preplanned settlements and organically developed towns. This is another example of how a

concept of organization found within “naturally” developed towns of the floodplain was transposed into the layout of preplanned towns. Such a dynamic is very visible at the Old Kingdom settlement linked to the mortuary complex of Queen Khentkawes at Giza, where house units were interconnected via communal doorways, an organization that Mark Lehner has termed the “intermingling of houses.”¹⁰ Even though the topography of the planned settlements, which are usually not located within the floodplain, did not impose spatial restrictions, the same concept of agglutinated building units was employed in this category of settlement too. This would indicate that this kind of organization within a settlement is mainly related to existing social factors.

In that respect, the patrimonial household model has been evoked several times as having been the primary characteristic of ancient Egyptian society. Mark Lehner adopts the concept of the “segmentary system,” marked by the repetition and similarity “in patterns of small structures to larger ones at more than one scale in a vertical hierarchy.”¹¹ He refers to the overall importance of households, which included more than just the core family and encompassed a much larger spectrum of people. This can be deduced from various textual records – for example, the Heqanakht papyri and the household census lists of the Middle Kingdom but also the internal layout of the large mansions at Lahun, which contained residential units added to the central core residence. The household was clearly an important social unit during the entire Pharaonic period, and the clustering of houses that seem to be closely interconnected by sharing the same facilities, walls, open spaces, and sometimes even communal entrances is good evidence for that. This social organization is still very visible during the New Kingdom – recognizable, for example, in the organization of the residential quarters at Tell el-Amarna¹² and the workmen’s village¹³ at the same site. Nevertheless, this is only one aspect of ancient Egyptian society, which was also dominated on a different level by political and socioeconomic phenomena that do not fit into this model. There is much evidence that on the level of the central government, with the king as head of the state, a strong, centralized bureaucracy was present that affected society in different ways but mainly on the wider socioeconomic front – for example, through the system of redistribution and the upkeep of communities settling in state-founded settlements. However, it would be wrong to argue that this situation was dominating the life of every ancient Egyptian. By the time of the First Intermediate Period – a

time characterized by political decentralization and the quick succession of relatively weak rulers – urban society seems rather to have flourished, an effect that can be seen in the emergence of local traditions and provincial culture as well as the expanding towns in the floodplain. There is no sign for a nationwide “collapse” of any sort, at least as far as Upper Egypt is concerned. In this respect, it seems that there were two interdependent socioeconomic systems that affected the settlement system in Egypt on different levels: one that operated on a wider national level and the other being entirely inherent to the life of the private communities.¹⁴ The evidence for provincial temples as centers for the local communities living in walled settlements shows that these places functioned as “autonomous centers of culture,” and these communities do not show the same uniformity and unilinear development that characterized the court culture especially during the third millennium BCE.

10.3 AN OUTLOOK INTO CROSS-CULTURAL COMPARISONS: THE CASE OF URBAN SOCIETY IN MESOPOTAMIA

Further aspects that have not been addressed so far and that can now be discussed after first having established some of the main characteristics for urbanism and urban society in ancient Egypt concern a cross-cultural comparison with Mesopotamia. In the past, much of Egypt’s failure to be considered as having had an urban society can be attributed to the fact that it was too readily compared with cities in Mesopotamia, without much of a concept of what Egyptian towns and cities were like. The main focus of this concluding section is to re-evaluate to what extent the case of Egypt differs (or not) in relation to one of the key examples of urban society in the ancient Near East. This is meant as a first outlook, with the aim of beginning to see the Egyptian civilization from a more global perspective.

The overall organization and layout of Mesopotamian cities resembles quite closely in certain aspects the characteristics also observed in Egypt – even if they were completely different in scale. On a microcultural level, the cultures display distinct differences that can be recognized within the respective political systems (for example, city versus territorial state), the prevalent climate conditions and geography, and the specific features of the administrative and economic systems. From a macrocultural perspective, there are quite a number of important similarities, which could be an indication that the structure

of the societies was not so different after all. Because urbanism is much better known in Mesopotamia than in Egypt, such a comparison might also be helpful for explaining some of the phenomena encountered in the latter region that cannot be fully explained as yet due to gaps in the archaeological and textual records.

The most prominent urban feature in Mesopotamia was the main temple, which stood in a raised position overlooking the city, either on a *ziggurat* or an elevated platform construction. Interestingly, the main temple did not necessarily occupy the town center but could be located along the periphery and was frequently part of a sacred area or sector.¹⁵ Those large sanctuaries also reflected the main landholders, a system that has parallels in Egypt as well. However, in the latter culture, temples most frequently stood in a central position within the town, and settlements developed around them.¹⁶ This can be witnessed, for example, at Tell Edfu where the Ptolemaic temple lies above earlier predecessor buildings, while the oldest settlement remains of the third millennium BCE were found in its vicinity (Figure 7.9). Similarly, the temple of Satet at Elephantine occupied a central position on the eastern island (Figure 8.40), and Karnak Temple was the center of the large Middle Kingdom city of Thebes (Figure 8.38). A significant difference between these two ancient Near Eastern civilizations, however, is the fact the Egyptian temples were never artificially elevated until Roman times. Because they were largely built of stone and new buildings reused older structures, their foundations did not rise significantly over time, whereas the surrounding settlements, with most of their architecture made of mud brick, would grow much faster. This could lead to configurations such as that of Tell Edfu, where the tell had risen more than 25 m above the level of the temple threshold by the Ptolemaic period.¹⁷ Large production sites and industrial areas were found along the marginal regions of the towns of both civilizations, deemed suitable for large-scale trash disposal and because of prevalent wind direction.¹⁸ A feature that is missing in both settlement systems is any larger open spaces used for local markets within the city center. In Egypt, there has been much debate on the topic of the existence of markets and where they would have taken place in relation to the town.¹⁹ Market scenes appear on a regular basis in Old Kingdom tomb decorations. In some cases, the presence of boats depicted in these scenes might indicate that there were specific locations close to the river where

these activities took place. This would also explain the lack of archaeological traces inside the towns. The Mesopotamian written source material establishes that places for trade and markets were located in the vicinity of the city gates.²⁰ River harbors and quay structures are other common features that would have been part of towns and cities in both regions, Egypt and Mesopotamia, where access to the major rivers, either direct or through canals, was crucial, as it made possible the main mode of transport and navigation.²¹

In terms of investigating possible parallels noticeable in both urban societies, the residential neighborhoods are specifically informative. In Mesopotamia, there is much evidence for so-called mixed neighborhoods, where various social groups with members of different ranks would have lived next to each other, forming stable social relationships.²² These residential quarters were characterized by large, elaborate houses with much smaller buildings in between them, suggesting a certain degree of social heterogeneity and probably reflecting extended and nuclear families living together in the same district.²³ This phenomenon is also visible at the later New Kingdom city of Amarna, but it has its origins already in the late Middle Kingdom, at Tell el-Dab'a, for example, where such groups of different-size house complexes were noted.²⁴

Differences in wealth are mainly evaluated through the size and complexity of the domestic courtyard houses in Mesopotamia, but there is also a link between house size and the size of the household. The largest houses were often made through the integration and assembling of several courtyard houses as families expanded, while smaller ones were often the result of the division of the houses into smaller family units.²⁵ This social interconnectedness based to some extent on kinship ties, but also on clientage, is also visible in the organization of entire neighborhoods where individual houses shared common walls – the same as in Egypt.²⁶ This would indicate that the inhabitants of towns and cities in both ancient societies shared features of close kinship ties and social connections, including a relatively high degree of literacy, which is well attested for Mesopotamia.²⁷ Different social ranks were not spatially separated from one another but intermingled on several levels.²⁸ The strong hierarchies and the exploitation of the poor by the rich can no longer be sustained by the archaeological data. A certain degree of prosperity and wealth can be deduced from the object distribution found in the excavations of these residential quarters.²⁹ In fact, the archaeological evidence from the

third and second millennia BCE in Mesopotamia points to “an overall degree of prosperity” that has been noticed on an interregional level throughout the northern and southern parts of the country.³⁰ The consistency also supports the notion of social stability, which is important.

Another feature that might have much closer parallels to ancient Egypt than previously assumed concerns the debate about the rural–urban dichotomy. The case of Mesopotamia, which has been better documented through archaeological and textual sources than has Egyptian society, might provide a useful paradigm from which to evaluate urban society in Egypt in relation to this topic.

The textual sources from Mesopotamia provide important insights about the inhabitants of urban settlements. Private land ownership in the form of orchards and grain fields is frequently mentioned, indicating some degree of autonomous food production by the urban inhabitants, who at the same time could also hold administrative or religious offices.³¹ This, together with the fact that the layout of villages in Mesopotamia did not dramatically differ from towns to cities, seriously questions the existence of a strong rural–urban dichotomy, which might not have existed in ancient times.³² Even small villages in Mesopotamia provide evidence that their inhabitants were as prosperous and educated as people living in cities, further stressing a certain degree of flexibility and mobility between different lifestyles.³³ This could be to some extent also valid for Egypt, even if the settlements in general existed on a smaller scale in comparison with those of Mesopotamia.

Apart from domestic buildings, the large residential neighborhoods in Mesopotamian cities included small shops, bakeries, and chapels among the houses, which were also part of the urban fabric.³⁴ The presence of smaller chapels and sanctuaries has also been attested in Egyptian cities, which is, for example, well documented in Elephantine. There has been little success in identifying distinct shop structures in Egypt. If the building complex of the sculptor Thutmose at the New Kingdom city of Tell el-Amarna can be taken as a typical example, his workshop was located within the outbuildings attached to his residence.³⁵

The typical house layout in Mesopotamia was the courtyard house, which has a large open space in the center, surrounded on all sides by rooms.³⁶ Another type of layout follows a linear arrangement of rooms, forming rather thin buildings.³⁷ The latter are usually much smaller than courtyard houses, covering less than

50 m², whereas the courtyard houses belong to the typical midrange size of houses occupying around 100 m². This pattern is somewhat comparable to that of the late Middle Kingdom houses at Elephantine, where the larger ones have also been termed courtyard houses – although they are much less regular in their internal layout than the courtyard houses found in Mesopotamia – and the smaller ones, which belong to the type of three-row houses, also follow a kind of linear pattern because the rooms are arranged in different rows behind one another (see [Figure 9.2](#)). Interestingly, the Mesopotamian courtyard house seems to have persisted throughout third and second millennia BCE, indicating more continuity in domestic building types than what can be seen in Egypt. The changes in the style of layouts for domestic buildings, analyzed here in various chapters according to the different time periods, demonstrate a gradual evolution of different house types. Several rectangular or L-shaped rooms formed the central core unit in Egypt during the third millennium BCE, and courtyards in the central part of the house appeared only very rarely.³⁸ From the Old Kingdom through the Middle Kingdom, internal room layouts changed, and even though common patterns can be observed, they are less constant than in Mesopotamia. It is noteworthy, however, that the Middle Kingdom layout of residential units appeared in a broad spectrum of house sizes, from palatial complexes to small domestic buildings. Several Egyptian examples of courtyard houses in medium-size domestic buildings have mainly been excavated at the town of Elephantine from the late Middle Kingdom. Their overall layout is quite irregular, though, in relation to the rooms arranged around the sides of the courtyard and do not compare well with Mesopotamian courtyard houses ([Figure 9.26](#)).

As this brief cross-cultural comparison demonstrates, Egypt and Mesopotamia certainly share some common features as far as their respective urban societies are concerned. The cultures evolved around the same time in the ancient Near East and were marked by strong political systems that led to the development of city-states in one case and a territorial state in the other. The peculiar environmental conditions that necessitated irrigation agriculture and dominated by a river floodplain are to some extent also comparable even if the general climate conditions are quite different. The fact that Egypt was much restricted and isolated by the hyperarid desert on each side of the Nile Valley allowed mainly for a kind of “linear” development of the country, and the emergence of a territorial state was evidently a result of this feature. In

contrast, Mesopotamia stretches over a very different climate zone from north to the south and is generally much less isolated from its neighbors than is Egypt. Contact between these two civilizations fluctuated through the third and second millennia BCE, and there is little evidence for much direct cultural influence.³⁹

This first analysis of archaeological data for ancient Egyptian settlements and Egypt's urban society offers not only a detailed overview of the current evidence, but it also sets the theoretical framework and establishes the parameters for further studies on urbanism in this region of the world. In this respect, a second volume is planned that will start with the evidence from the late Second Intermediate Period (ca. 1600 BCE), a time that can be considered a catalyst for many new developments that characterize the following New Kingdom period – currently the most discussed period within this subject matter. The upcoming volume will also include an analysis of the Ptolemaic and Roman periods, providing evidence for the Egyptian character and traditions that continued to be the major influence for the evolution of urban society despite increased influxes from the Greek and Roman cultural spheres.

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FINAL CONCLUSIONS

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Notes

INTRODUCTION

1. See the recent studies by Richards 2005; Willems 2001; Stevenson 2009.
2. See discussions by Eyre 1999 and Lehner 2000.
3. Eyre 1999, 35–39; Lehner 2010, 85.
4. For example, at the end of the 3rd Dynasty, the king erected a series of small step pyramids close to important provincial towns that seem to have promoted the cult for the king. The creation of so-called new towns, which have been interpreted as signs of the urban investment of the central government, are in fact a measure to take advantage of the existing settlements, such as hamlets and villages, in order to create a system of domains and estates paying taxes in form of tributes to royal institutions such as the mortuary temples. See Martin-Pardey 1976.
5. Lehner 2000, 275–276.
6. Lansing 2003, 183.
7. Lansing 2003, 185.
8. Lehner 2000, 282.
9. Examples of this approach can be found in Helck 1958, Baer 1960, Gestermann 1987, and the discussion by Seidlmayer 1996.
10. Lehner 2000, 278–280. This approach was adapted from the detailed study by D. Schloen on patrimonialism in the ancient Near East: Schloen 2001.
11. While the author is fully aware that this term is charged with too many issues not really applicable to ancient Egyptian society, it is nevertheless a helpful term for designating the larger group of workers in an urban environment. B. Kemp first raised the question about when towns and cities became inhabited by workers who were settling here because of employment opportunities, outside of their extended household and kinship ties. See Kemp 1989, 308.
12. The early Second Intermediate Period follows the cultural tradition of the Middle Kingdom and therefore needs to be included here. The political situation is characterized by independent rulers of foreign origin (the so-called Hyksos) who established themselves in the Delta in addition to the Egyptian kings who ruled over most of the Nile Valley. A major break as far as material culture is concerned can only

be noted from the late Second Intermediate Period onward, which will be featured in the second volume of this study.

13. See Martin-Pardey 1976 for a detailed analysis.
14. There are no sources about who would have been involved in the planning process of a state-founded settlement, and it is unknown whether the planners themselves would ultimately be occupying parts of it. Depending on who was in charge of conceptualizing a house layout, the results could be quite different, and this seems to be reflected in the considerable variety in size and layout of houses at a number of state-founded settlements.
15. This is the case when textual sources name various towns that can be located within a wider region but for which no archaeological evidence exists. See Section 7.3.
16. O'Connor 2009.

1 ANCIENT URBANISM AND THE CASE OF EGYPT

1. <http://www.santafe.edu/templeton/complex-societies/>
2. O'Hanlon 2013.
3. See the influential studies by Childe 1950, Wheatley 1972, and Cowgill 2004, to name a few. For a broader summary, see Marcus and Sabloff 2008, 3–26.
4. It is outside the scope of this study to include a wider comparison between Egypt and other ancient societies in terms of urbanism. See Trigger 2003, esp. 120–141.
5. Trigger 2003.
6. Cowgill 2004, 526.
7. Trigger 2003, 120. In this study, he includes cases in which ceremonial centers were the main focus of early society.
8. Trigger 2003, 131–132.
9. Adams 1981.
10. For the Delta survey of the Egypt Exploration Society (<http://deltasurvey.ees.ac.uk/ds-home.html>, see Wilson and Spencer 2004 and also the work by Trampier 2010. These studies are probably what come closest to a regional survey and analysis of settlement patterns in Egypt. The sites included in these studies lie outside the time frame of the current study.

11. The first tentative attempt for integrating environmental patterns and settlements was carried out by K. W. Butzer; see Butzer 1976. Regrettably, not much has changed in terms of new data available since this publication.
12. Trigger 2003, 120.
13. Schloen 2001, 196–197.
14. Cowgill 2004, 527.
15. Wheatley 1972, 604. Wheatley explains how this rural-urban dichotomy fails to include the “wide range of levels and types of societies that exist in association with urban forms.” Along similar lines, see Benet 1963.
16. Kemp 2006, 200.
17. Cowgill 2004. See especially 525–529. This has also been pointed out by Trigger 2003, 120.
18. See Cowgill 2004, 526.
19. Cowgill 2004, 527.
20. Wheatley 2001, 59.
21. Friedmann 1961, 91–92.
22. Wheatley 1971, 398.
23. Trigger 1985, 343.
24. Trigger 1985, 344.
25. This has led Trigger to believe that one of the main differences between cities in Mesopotamia and Egypt was that the inhabitants of Egyptian urban centers were exclusively specialists who were “divorced from agricultural production while in the former much of the urban population consisted of farmers”; see Trigger 1985, 348. This is however not really correct in view of the archaeological evidence.
26. Trigger 1985, 344–345.
27. For the importance of fluvial transport, see Tallet (forthcoming). There is good evidence for the presence of two major river channels at Memphis, which helped to link the limestone quarries at Turah to the royal building projects at Giza and Saqqara. In this respect, see also Bunbury and Jeffreys 2011, who discuss the river channels and their transformations in the Memphite region during the 3rd millennium BCE.
28. As is indicated in the biography by Harkhuf of Elephantine; see Raue 2008, 7.
29. See Section 5.2 for details.
30. For evidence and implications about social complexity relating to the consumption of different foods by individuals from distinct social groups, see also Gumerman 1997.
31. The importance and growth of the town of Abydos was linked to its religious and ceremonial roles as the burial site of Osiris. See O’Connor 2009.
32. Jacquet-Gordon 1962, 3–25.
33. Ismail Khaled and Vymazalova 2011, 191. See reports on the discovery of decorated stone blocks along the causeway of Sahure, which mention the foundation of more than 141 domains and estates for his funerary cult.
34. See discussions by Lehner 2010 and Lehner 2000, 286–292.
35. The following presentation of issues and definitions related to research focusing on Egyptian settlements provides a more general overview and includes examples from later periods that lie outside the time frame of the current study. However, a second volume dealing with the evidence for the later Pharaonic periods is currently in progress and will analyze those sites in depth. Therefore, the current chapter is meant as a more general introduction and a laying down of the groundwork for investigating urbanism in ancient Egypt on a broad basis that will apply to a large extent also to the analysis presented in the second volume.
36. See Butzer 1976, 57–98, and Hassan 1993. In these two studies, population records and settlement counts of medieval Egypt have been used as guidelines for estimating conditions in Pharaonic Egypt.
37. See Section 3.2 for details.
38. Ballet and Marouard 2012; Hartung et al. 2007.
39. Kemp 2006, 220–221; Valbelle 1985; and for further sources of the Pharaonic period with census lists, see Valbelle 1987.
40. Valbelle 1985, 77.
41. Demarée and Valbelle 2011.
42. This is typical for the towns of Tell el-Dab’a and Amarna, where larger houses or villas were surrounded by smaller houses, forming a neighborhood containing a mix of social groups. It has been proposed that the servants and workers attached to the main household of the largest house lived in the smaller ones located in the vicinity. See Bietak 2010, 18, and Kemp 1989, 305–312.
43. Naroll 1962.
44. Brown 1987; see also LeBlanc 1971 and Wiessner 1974.
45. See Section 8.2.3.
46. See Spence 2004b for the architectural analysis of Amarna houses and the evidence for more than one floor.
47. There is evidence for mud-brick houses in Yemen that have kitchens on the upper floors. See Beckingham 1983, 223.
48. Spence 2004b, 129.
49. von Pilgrim 1996, 223–230.
50. Kemp 1986.
51. See Samuel 1999, 128–129.
52. This is one of the best-known cities of ancient Egypt, and it only lasted for about 15–20 years.
53. Kemp 1989, 269. See also Hassan 1993, 563. While Hassan points out many of the shortcomings in the data, he also includes a substantial amount of unverifiable assumptions that have to be considered unreliable in view of the actual evidence.
54. Hassan 1993, 563–564.
55. See Section 3.1 for further details.
56. Kemp and Garfi 1993, fig. 10.
57. Kemp 1977, especially 133–134.
58. Bietak 2010, Forstner-Müller 2010, Forstner-Müller 2012.
59. Tacoma 2003, 33–65.
60. A good illustration of this phenomenon is the New Kingdom workmen’s village at Deir el-Medineh. See Demarée and Valbelle 2011.
61. Eyre 1999, 35.

62. Childe 1950, 9.
63. Trigger 2003, 133.
64. Moeller 2004. The evidence for town walls during the New Kingdom is quite incomplete, and while there is no evidence for a major wall at Amarna, this does not necessarily mean that this was the norm. See also the discussion by Spence 2004a.
65. Cowgill 2004, 527.
66. Trigger 1985, 346.
67. Trigger 2003, 131.
68. Jacquet-Gordon 1962.
69. Lehner 2010, 86.
70. The study on the Old Kingdom term *nḥwt m3wt* by J. C. Moreno García calls for caution in the interpretation of “towns” founded by the state. Moreno García was able to demonstrate that this term had most likely been applied to a specific kind of royal estate. See Moreno García 1998a, 40.
71. See Section 8.2. Such settlements have been found at Qasr el-Sagha and Lahun in the Fayum and at Tell el-Dab’a.
72. Kemp 1989, 269–270, fig. 88.
73. This is an issue that will be explored in the depth in the second volume of this study.
74. Kemp 1987, 37–41.
75. See Section 5.2.2.1.
76. Redding 2007.
77. Redding 1992.
78. For a brief survey and evaluation of the Egyptian terminology, see Bietak 1979, 98–100, Atzler 1972, and Atzler 1968. This phenomenon is paralleled in other cultures of the ancient Near East; see Schloen 2001, 196.
79. See Erman and Grapow 1926–1963, Vol. 5, 455–456.
80. Gardiner 1947.
81. This notion is further confirmed by the secondary New Kingdom form *dmy.t*, which retains the overlapping meanings of “town,” “port,” and “harbor”; see Erman and Grapow 1926–1963, Vol. 5, 456.
82. See also Section 8.4. The Middle Kingdom settlement at the island of Elephantine appears under the heading of *menenu* (*mmw*) in ancient Egyptian sources, which has been translated as “fortress.”
83. Ritner and Moeller 2014, 6, no. 48.
84. Gardiner 1948; Kemp 2006, 311–312. See also Antoine 2011, 16–17, 22–27, for a recent attempt to reconstruct the topography of the various kinds of land plots and related settlements that demonstrates the uncertain identification of settlement types and installations relating to the numerous toponyms mentioned in the papyrus.
85. Kemp 2006, 312.
86. “My heat has burned up their villages (*dmi.w*),” in Edgerton and Wilson 1936, Vol. I, pl. 23, p. 16 l. 55, and “Every survivor from his hand (fled) to their towns (*dmi.w*),” in Edgerton and Wilson 1936, Vol. II, pl. 82, l. 30, p. 80. See also the use *nḥwt* for the Meshwesh conquering the Tehenu settlements: “Devastated and desolate were their towns,” in Edgerton and Wilson 1936, Vol. II, pl. 82, l. 14.
87. Ritner 2009, 329, no. 17. In two instances, the word *dmi* has been used. It was translated as “villages,” while term *nḥwt* was employed for the description of the Meshwesh fighting the Tehenu (they succeeded in destroying the “towns” of the latter).
88. As Robert Ritner concludes, “. . . Egyptian scribes may simply be projecting onto Libya their own cultural expectations” and probably used the experience/tradition they had with battle descriptions fighting in the Levant. Ritner 2009, 329.
89. The defined categories are relevant for the entire Pharaonic period, but because of the more limited time frame of the current study, a preference is given to examples dating to the earlier periods. However, in some cases later examples are brought into the discussion when they are especially pertinent for the definition of a particular category.
90. There has been some discussion on the size and complexity of Old Kingdom Memphis. Memphis was certainly a major capital in the New Kingdom and most likely never lost its urban status until the end of the Pharaonic period.
91. See the new field school project at Mitrahina, which has recently discovered Middle Kingdom settlement remains; AERA 2011. For the excavation of a small area of the Middle Kingdom town quarter of Kôm Rabi’a, see Giddy 2013.
92. See Section 8.3.
93. A new research project focusing on the reexamination of archaeological and textual sources for the location of ancient Itj-tawy is currently in progress under the direction of David Lorand in collaboration with the IFAO; see <http://www.ifao.egnet.net/axes-2012/espaces-pouvoir/2012-lisht/>.
94. Arnold 1996. See also a recent summary by Malleson 2007, which confirms the problems relating to the identification and location of Itj-tawy close to el-Lisht. For a new project that has recently started on this quest, see Lorand 2013.
95. Love 2003.
96. Jeffreys 1985; Malek 1997.
97. See the discussion in Section 5.3 and Lehner 2010, Tavares 2011.
98. The Abusir papyri indicate a complex system of production and delivery of goods from nearby settlements and production facilities, and there might have been temporary royal residences close to these royal cemeteries; Vymazalova 2010, 200–201, no. 33; Vymazalova 2011, 302. The recent discovery of papyri at the site of Wadi el-Jarf has provided new evidence for the logistics involving the construction of the great pyramid at Giza under the reign of Khufu. It is evident that there had been important settlements and harbor installations in the vicinity of the royal construction site; see Tallet (forthcoming).
99. See the Neferirkare archives, which document a close economic connection between the royal funerary complex and the palace of the king though they do not provide any information about the exact location of this palace.

100. For the economic function of this temple on a national level, see Papazian 2010 and Papazian 2005.
101. Malek 1997, 91–94, fig. 1. The toponym of *ḥnbw ḥd*, “White Walls,” has been attested in connection with Memphis from the Early Dynastic Period onward. The precise location of Memphis has been reconstructed close to the Western Desert escarpment during the early 3rd millennium BCE; see most recently Bunbury and Jeffreys 2011, 68, fig. 4. Another possibility is that the term “White Walls” refers exclusively to the royal palace; see Franke 2003.
102. See Section 8.3 for further details concerning the archaeological remains at Karnak.
103. Archaeological evidence is difficult to present for this point prior to the New Kingdom, but reference is made to the royal workshop at Itj-tawy in the inscription of Horemkhauf from his tomb at Hierakonpolis; see Hayes 1947. The best archaeological evidence for a royal workshop comes from the house of the sculptor Thutmose, which was excavated at el-Amarna and dates to the late 18th Dynasty of the New Kingdom period; see Seyfried 2012.
104. Baines and Málek 1996, 14–17.
105. Midant-Reynes 2003, 250–258; Kemp 1989, 31–35, fig. 8.
106. Martin-Pardey 1976, 14–16.
107. See details in Section 4.5. Its role as a nome capital from the Old Kingdom onward has not been entirely clear, as the site of Kôm Ombo might have had this status during most of the 3rd millennium BCE. Wolfgang Helck suggests that there might have been a division of the nome into two administrative districts; see Helck 1974, 68–69.
108. In this respect, the distribution of titles on clay sealings found at Elephantine is noteworthy; see Pätznick 2005. These sealings date from the Early Dynastic to the Old Kingdom period.
109. Traces of such an administrative building complex have been found on the western island of Elephantine. See Seidlmayer 1996 for further details.
110. See the study on the sealing corpus by Pätznick 2001 and Pätznick 2005.
111. Martinet 2011, 172–176, 209–231.
112. Weni the Elder is a good example for such a career; see Richards 2002 for further details.
113. Contrary to Eyre’s hypothesis that there was “no real social stratification but only variations of status within a common cultural and social milieu,” see Eyre 1999, 36–37.
114. See detailed discussion in Section 7.6.
115. Ryholt 1997, 306–307.
116. Bussmann 2010, 506–513.
117. Bussmann 2010.
118. Moeller 2004.
119. The New Kingdom is the only period for which evidence for town enclosure walls is hard to come by. Evidence for New Kingdom settlements in the provinces has been difficult to find, which is probably linked to a shift in settlement patterns during the early 18th Dynasty. Large-scale leveling activities during later periods of occupation also appear to have affected the survival of New Kingdom remains. This problem will be discussed in depth in the second volume of this study. See also Spence 2004a, 270.
120. At Tell Edfu, it has been noted that elements of the Old Kingdom enclosure wall were used as the southern wall of the Second Intermediate Period silo court. See Moeller 2010, 87.
121. The 2012 season at Tell Edfu unearthed an important sequence of enclosure walls dating to the Old Kingdom. It is not quite clear yet whether these walls marked the limits of the town during this time or were in fact perimeter walls for a temple or palace. See Moeller and Marouard 2013, 115–119.
122. Pantalacci 1985.
123. See Sections 5.5.1 and 7.5.
124. Soukiasian, Wuttmann, and Pantalacci 2002.
125. Adams 1998, 27–28.
126. See Section 4.3.1 for further details.
127. See Section 7.4.3 and Moeller and Marouard 2013, 119–121.
128. Moeller 2010, 87–98.
129. For Hagar Edfu, see the recent work by Davies 2006; Davies 2008. For the cemetery at Tell Edfu, see the summary and reevaluation by Seidlmayer 1990, 40–68.
130. Moeller 2005.
131. Seidlmayer 2005. See also Section 8.4 for further details.
132. Fisher 1917; Fischer 1968 and Petrie et al. 1900.
133. See the autobiographical inscription of Qar from Edfu, who states clearly that he was brought up at the royal residence and then sent to the town of Edfu, Moreno García 1998b.
134. Raue 2008, 7: “I came today from my city, I descended from my nome, I built a house, I set up the doors. I dug a lake, and I planted trees.” See Breasted 1906, 151–152 §328.
135. For a comprehensive overview of the evolution of this site, see Bietak 1996; Bietak 2010. The size and complexity of Tell el-Dab’a certainly justifies its inclusion within this category of settlement.
136. For Bubastis, see van Siclen III 1996; for details about Kôm el-Hisn, see Wenke et al. 1988. See also Sections 5.4 and 9.3.
137. Hartung 2008, and see Section 4.4 for more details.
138. See the recent work carried out by Mark Lehner and AERA at the site: Lehner et al. 2011.
139. See Section 5.2.3.2.
140. See Section 8.2.4 for details.
141. See Section 8.2.4 for a presentation of the archaeological evidence and discussion.
142. This is especially noticeable in the causeway-like approach to the main gate of the town. See Frey and Knudstad 2008.
143. Collier and Quirke 2002, 2004, 2006.
144. J. Wegner, pers. comm. There is no enclosure wall on the desert side of the town, and it looks as if the external walls of the constituent buildings might be the same as an enclosure wall but leaving the streets between the housing blocks openly accessible, which is quite different at Lahun, for example.

145. Wegner 1998, 2006.
146. It is possible that the stone temple at Qasr el-Sagha, which lies in the vicinity of the planned settlement, was a focus of the local community, but there is no proof that both were part of the same planning. At Tell el-Dab'a, the planned settlement remains at Ezbet Rushdi were partially built over with a small temple during the later 12th Dynasty, but there is no link between the previous community and this temple. See Chapter 8.2.2.
147. See Chapter 8.2.3 for more details.
148. See further discussions to Chapter 8.II.
149. See Dunham 1960; Emery 1979 and Smith 1990.
150. See Smith 1995, 1990.
151. These are the latest examples of town planning known for Pharaonic Egypt. They will be discussed in depth in the second volume of this study.
152. Samuel 1999.
153. Kemp 2006, 206–211. For a new analysis of such settlement sites, see Section 5.2.
154. Lehner 2010.
155. Lehner 2010, 94.
156. See Section 5.2.2.1 for details.
157. Lehner and Tavares 2010.
158. M. Lehner noted a slightly longer continuation of the Eastern Town, into the beginning of the 5th Dynasty.
159. Saleh 1974.
160. Willems 2009.
161. Willems et al. 2009, 322–323.
162. Shaw 1994 and Shaw and Jameson 1993.
163. Shaw 1994, 111.
164. See Tallet 2012; Tallet and Marouard 2012; Tallet, Marouard, and Laisney 2012; Tallet and Marouard 2014; and Fattovich 2012.
165. Gardiner 1947.
166. Ismail Khaled and Vymazalova 2011.
167. See Lehner 2000, 286–290.
168. This is certainly related to a general lack of research interest by archaeologists to search for such sites.
169. Only a small part of this settlement has been excavated, which makes it impossible to assess its precise nature, size, and layout. See Wenke et al. 1988, 6–7, fig. 1.
170. Lehner 2010.
171. Redding 1992, Redding 2011.
172. Lehner 2010, 94.
- day 'Naukratis' rang in my mind, and I sprang over the mounds with that splendid exultation of a new discovery, long wished for and well found.”
3. Petrie 1892, 112–113.
4. Petrie and Sayce 1891, 10–12.
5. Petrie and Sayce 1891, 8.
6. Gallorini 1998.
7. A tell site is an artificial mound that formed due to the long-term settlement of people in the same place, which can sometimes encompass millennia. The tell at Edfu had reached a height of 27 m above the natural bedrock by the Early Islamic period and covered several hectares.
8. The *sebbakhin* were local farmers who, at the end of the nineteenth century, removed the soil and mud bricks of ancient tell sites and used them as fertilizer for agriculture. This led to large-scale destruction and disappearance of settlement sites. *Sebakh* is the Arabic term for the nitrogen-rich soil extracted from these sites. See also Section 3.2, for further details.
9. Henne 1924, 3.
10. Henne 1924, 5.
11. Henne 1924; Henne 1925; Guéraud 1929; Alliot 1933 and Alliot 1935.
12. Bruyère et al. 1937; Michalowski 1938 and Michalowski 1950.
13. Bruyère 1924, 2–3.
14. Bruyère 1934, 79–91.
15. Bruyère 1934, 79.
16. Already Bruyère uses the term *urbanisme* in conjunction with the site. See Bruyère 1934, 79.
17. For example, Meskell 1999 and Meskell 2002.
18. See Borchardt and Ricke 1980 and Kemp and Garfi 1993.
19. Husselman and Peterson 1979, 1.
20. Boak and Peterson 1931, 3–4.
21. Boak 1933, 54–55.
22. Boak and Peterson 1931, 3.
23. See Husselman and Peterson 1979, plans 1–45, and Boak and Peterson 1931, plans III–VI. Also noteworthy are the numerous published photographs that detail the architecture of the domestic houses, which were found in an astonishingly good state of preservation.
24. Husselman and Peterson 1979, xi.
25. Hassan 1943.
26. Hassan 1943, 2.
27. Hassan 1943, 35–46.
28. See the most recent report about their work in Lehner 2011.
29. Fakhry 1952; Fakhry 1959 and Fakhry 1961.
30. Reid 1997, 149; Säve-Söderbergh 1987.
31. Säve-Söderbergh 1987, 195, fig. 20.
32. Säve-Söderbergh 1987, 187.
33. Säve-Söderbergh 1987, 188.
34. Harry Smith expressed his concern that “those who knew the peculiar conditions of Nubia, especially that wind erosion and recent deposits of silt and sand can make all surface traces even of large sites disappear entirely, were

2 CURRENT AND PAST STUDIES OF EGYPTIAN SETTLEMENTS

1. See <http://www.ucl.ac.uk/museums/petrie>.
2. Petrie 1892, 38, 64. He gives a vivid description about how he discovered the settlement of Naukratis and his excitement at identifying its name: “... Naukratis was before me, and the unknown town now had a name; and that a name which had been sought for often, and far from this place, and which was one of the objects of Egyptian research to discover and truly assign. All that

- aware that the methods, which a rapid sondage expedition would have to use, could as a rule reveal perhaps less than 50 percent of the sites which might be found with other more leisurely methods.” See Säve-Söderbergh 1987, 203.
35. Säve-Söderbergh 1987, 204.
 36. For the Middle Kingdom fortresses, see Smith 2003, 1995; Kemp 1989, 166–180.
 37. Wilson in Kraeling and Adams 1960, 124–136.
 38. Wilson in Kraeling and Adams 1960, 126.
 39. Ucko, Tringham, and Dimbleby 1972.
 40. For example, by O’Connor 1972a, 1972b, and Bietak 1979.
 41. Bietak 1979; Kemp 1977.
 42. Butzer 1976.
 43. See the article by Hassan 1993.
 44. See http://www.auaris.at/html/history_en.html.
 45. See http://www.amarnaproject.com/pages/amarna_the_place/index.shtml.
 46. For a short history of excavation, see <http://www.hierakonpolis-online.org/index.php/history-of-exploration>.
 47. Hoffman 1982.
 48. A good example of this new trend is Kent Weeks’s edited book that appeared in 1979, entitled *Egyptology and the Social Sciences*, which includes five articles by Egyptologists, thereby providing an insight into the current research topics and problems. See Weeks and Bietak 1979.
 49. See Boessneck and von den Driesch 1997, Boessneck and von den Driesch 1988, Boessneck and von den Driesch 1990, and Boessneck and von den Driesch 1993 for a selection of different sites and periods in Egypt.
 50. Wenke et al. 1988; Redding 1992, 2007a, b.
 51. Whitcomb and Johnson 1982, 355–377.
 52. Samuel 1996a, 1996b, 2000.
 53. Murray 2009, 2007; Newton 2005, Newton and Midant-Reynes 2007.
 54. Ricke 1969, 49–82.
 55. Reisner 1942.
 56. See Arnold 1982, 1988, and Arnold, Bourriau, and Nordström 1993.
 57. There are many researchers involved in pottery studies, and there are new scholarly journals dedicated solely to ceramic studies, which appear on a regular basis – e.g., *Cahiers de la Céramique Égyptienne* (since 1987) and the *Bulletin de Liaison du Groupe Internationale d’Étude de la Céramique Égyptienne* (since 1975).
 58. See Pusch 1999.
 59. Summarized in Bietak 2010 and Forstner-Müller 2010.
 60. Hartung et al. 2007.
 61. One of the most frequently employed specialists for geophysical work is Tomasz Herbich, who has worked at many sites in Egypt. See Herbich 2003.
 62. Parcak 2009; see also the resources available at CAMEL (Center for Ancient Middle Eastern Landscapes) of the Oriental Institute, University of Chicago, <http://oi.uchicago.edu/research/camel/>.
 63. It is outside the scope of this chapter to provide a full list of all the current excavations and fieldwork projects that are concentrating on ancient Egyptian settlements, but the results of many of those projects will feature prominently within this study.
 64. Lampl 1968, 23–32.
 65. He seems to have conducted much in-depth research on publications relating to examples of ancient Egyptians towns and cities. He also included a series of site plans and maps for the Egyptian examples; see Lampl 1968, figs. 61–88.
 66. Lampl 1968, 32.
 67. Hammond 1972.
 68. Hammond 1972, 1–2. The conference proceedings by Ucko, Tringham, and Dimbleby were published the same year as Hammond’s study, but Hammond was not able to make use of them in his work, which is regrettable.
 69. Hammond 1972, 65–76. He also summarizes the history of ancient Egypt, emphasizing the prominent funerary architecture and related culture in a strict top-down approach.
 70. Ucko, Tringham, and Dimbleby 1972.
 71. Shaw et al. 1993; Trigger 2003; Fletcher 1995; Yoffee 2006 and Manzanilla 1997.
 72. Gates 2003, 2011.
 73. Storey 2006. This book is the result of the Archaeology Division session for the 95th meeting of the American Anthropological Association in Philadelphia, which initially focused on the population of cities. It was quickly realized that a discussion of urbanism had to be included in order to fully consider the demographic dimension.
 74. Yoffee 2006, 59.
 75. Figure 3.7 shows a plan of Deir el-Medineh but is wrongly labeled “Amarna workmen’s village.” Equally confusing is the lack of labels on this illustration, which includes not only the village of Deir el-Medineh but also the adjacent necropolis. From the plan alone, it is not possible to distinguish between the tombs and the houses; Yoffee 2006, 67.
 76. For the latter site, the main foci are the royal necropolis and the pyramids, whereas for the settlement, the palace of Merenptah is marked, as is the enclosure of the temple of Ptah, both of which date much later than the pyramids and funerary monuments. See Yoffee 2006, Figure 3.4. Little explanation on this figure is given and can be confusing to any reader less familiar with ancient Egypt.
 77. Comprehensive analyses and studies that put the archaeological evidence within the wider framework of ancient Egyptian history and society are not always available for each site. Reading site reports can be extremely time consuming and to some extent daunting for nonspecialists in the field. It is also noteworthy that Yoffee is aware of these shortcomings in stating that “in further studies, I intend to illustrate and discuss the internal structure of the earliest cities whose sizes I have depicted here.” Yoffee 2006, 62.
 78. Kemp 2006, 74–78, fig. 21. Kemp proposes that one of the phases leading to state formation was the presence of smaller “incipient city-states,” probably sites such as Hierakonpolis and Naqada, which seem to have been regional power centers. However, there is little conclusive data about the layout, size, and internal organization of these early cities.

79. See also the discussion of “city-states” in early Egypt by Wenke 1997.
 80. Dreyer 1998.
 81. Yoffee 2006, 60.
 82. Trigger 2003, ch. 7, 120–141.
 83. Fletcher 1995.
 84. Fletcher 1995, 147, fig. 6.10.
 85. Fletcher 1995, 146.
 86. Manzanilla 1997.
 87. Manzanilla 1997, 16–17. I would like to point the reader to a review by B. Kemp of this publication: Kemp 2000.
 88. Bard 1997.
 89. Bard 1997, 79. Unfortunately, she did not include any plans or illustrations.
- ### 3 THE ENVIRONMENTAL SETTING
1. Adams 1981.
 2. Feeney 2006.
 3. Said 1994, 88.
 4. Said 1994, 55.
 5. See Hoffman, Hamroush, and Allen 1986, 122–132; Hoffman, Hamroush, and Allen 1986.
 6. Dufton and Branton 2010.
 7. Hassan 1997, 215–216.
 8. Wetterstrom 1993.
 9. Hoffman 1982, 132.
 10. Midant-Reynes 2003, 66–87.
 11. Butzer 1976, 20–21, fig. 2.
 12. Butzer 1976.
 13. Said 1994, 55.
 14. Said 1994, 188.
 15. Butzer 1976, 51–56.
 16. Seidlmayer 2001, 87–89. It is not clear how these measurements were obtained; see discussion by Jéquier 1900.
 17. Seidlmayer 2001, 81–87, including further references.
 18. Bernhardt, Horton, and Stanley 2012; Stanley et al. 2003 and Krom et al. 2002.
 19. See the critical discussion by Seidlmayer 2001, 73–80, and Butzer 1976, 52.
 20. Szafranski 2003.
 21. Butzer 1976, 16.
 22. Said 1994, 61.
 23. See note 4 and also Graham 2010, 125–127.
 24. This stands in much contrast, for example, to the phenomenon of the Acropolis in ancient Greece, where the temple and sanctuaries usually occupied the highest elevated place within the settlement.
 25. T. Nichols, pers. comm. (November 2012). See also Bunbury, Graham, and Strutt 2009.
 26. Caminos 1977; Caminos 1955. This toponym appears already during the Old Kingdom in connection with a royal domain; see Jacquet-Gordon 1962, 59, 432, no. 6.
 27. Klemm and Klemm 1993, 249.
 28. Wildung 1977.
 29. There might have been two periods of disruption caused by an episode of lower floods around 2000 and 1200 BCE; see Said 1994, 81.
 30. Said 1994, 79–81.
 31. See Section 8.2.3 for details about the settlement remains in the Fayum region.
 32. Hassan and Tassie 2006.
 33. Hassan and Tassie 2006, 39.
 34. Butzer 1976, 22.
 35. Said 1994, 70–71, fig. 1.30.
 36. El-Gamili, Hassanien, and El-Mahmoudi 1992.
 37. El-Gamili, Hassanien, and El-Mahmoudi 1992, 284–285.
 38. See, for example, the detailed study of settlement patterns through survey work in the western Nile Delta by Trampier 2014.
 39. Bietak 2010, esp. 13–15, figs. 6, 9a–d.
 40. Bietak 2010, 13.
 41. See Section 7.4.
 42. See, for example, the study of the shift in settlement at ancient Memphis by Jeffreys and Tavares 1994; Jeffreys 1996 and Jeffreys 2008.
 43. Lutley and Bunbury 2008.
 44. See Lutley and Bunbury 2008 and Lehner 2009.
 45. Lutley and Bunbury 2008, 5. See also Section 5.3 for further discussions relating to the location of the Old Kingdom capital.
 46. Kemp and Garfi 1993, 39–41.
 47. Kemp 1989, 266–273, fig. 88.
 48. Said 1994, 63. It probably branched off the main river in the region of Assiut, where a limestone ridge has been noted that caused the river to divide into two branches – a larger and a smaller one.
 49. Arnold 1996, 13, states that it is quite likely that the remains of the capital at el-Lisht are currently buried under thick layers of alluvium. He also notes several settlement mounds in the area and the presence of large quantities of pottery in the deposits of soil that were left along the side of the el-Muhit canal.
 50. O’Connor 2009, 5.
 51. Patch 1991.
 52. See also the study of the mortuary landscape during the Middle Kingdom by Richards 2005.
 53. Bietak 1979, 114, no. 34a.
 54. See, for example, the settlement of Wah-Sut in South-Abydos, which was linked to the royal mortuary complex of Senwosret III; see Section 8.2.5 for further details.
 55. Darnell 2002.
 56. See Sections 5.5.1, 5.5.2, and 7.5 for further details.
 57. Bailey 1999.
 58. Mackenzie 1985.
 59. Kemp 2000.
 60. Foucart 1901.
 61. Foucart 1901, 49–50.
 62. Bailey 1999, 213. At Karanis, the archaeologists had focused excavation in certain areas because of the *sebak* diggers, who

would get the excavation spoils, and due to the constant pressure of time to get the work done. See [Section 2.1](#) for further details about the excavation of the University of Michigan.

63. Bailey 1999, 213–214.
64. Bailey 1999, 213; see also Maspero 1912.
65. Bailey 1999, 211–212.
66. Wilkinson 1982; Wilkinson 2003.
67. Bailey 1999, 215.
68. Wilkinson 2003, 117. In the latter case, sherds were much more worn and much more restricted to specific cultural periods.
69. For example, recorded by Somers Clarke at Elkab; see Clarke 1921, 59.
70. These dense fills of pottery sherds have recently been noted by Thomas Nichols, the engineer in charge of the dewatering project at the temple of Edfu.
71. Ball 1939.
72. Said 1994, 59.
73. Said 1994, 59–60.
74. Andres and Wunderlich 1992.
75. Andres and Wunderlich 1992, 160, fig. 3.
76. Andres and Wunderlich 1992, 164.
77. See [Section 1.3](#) for further details.
78. Alexanian and Seidlmayer 2002.
79. Borchardt 1905.
80. Close to the location of the Valley temple, the Middle Kingdom occupation lies directly on top of the Old Kingdom one; see Alexanian and Seidlmayer 2002, 24, fig. 15.
81. Lehner 2009, 111.
82. See Abd El-Raziq et al. 2013 and Pantalacci and Denoix 2007.
83. See, for example, http://news.nationalgeographic.com/news/2002/05/0531_020531_TVwatertable.html. Another recent example of an Early Islamic site that is in much need of protection is the settlement of Istabl Antar in Cairo, see <http://english.ahram.org.eg/News/51335.aspx>.
84. Parcak 2009, 208–232.
85. von Pilgrim, Bruhn, and Kelany 2004.
86. For further information, see <http://www.ifao.egnet.net/archeologie/murailles-caire/>.
87. See the SCA Regulations for Foreign Archaeological Missions, item 2 of the General Guidelines, at http://www.sca-egypt.org/eng/pdfs/SCA_FM_Regulations.pdf.
88. This project covers a wide range of periods. See, for example, Rowland 2011 for the discovery of Old Kingdom structures.
89. Rosenow 2010.
90. Tristant, De Dapper, and Midant-Reynes 2008.
91. Trampier 2014.

4 THE ORIGINS OF URBAN SOCIETY

1. See, for example, Cialowicz 2011, Eigner 2003, van Haarlem and Hikade 2006, and Midant-Reynes 2009; Midant-Reynes and Buchez 2014 – see esp. 18–29, 292–293. The recent excavation report about Tell el-Iswid presents a brief

description of the settlement remains and related finds dating to the Naqada III period.

2. Wengrow 2006, 82.
3. The earliest evidence for a fortified enclosure wall was found at the site of Tell es-Sakan in southern Palestine; see de Miroschedji et al. 2001. A slightly later example of a heavily fortified enclosure was found at the 1st Dynasty fortress at Elephantine; see Ziermann 1993. See further details [Section 4.5](#).
4. Earlier village-like installations are deliberately omitted unless they can be used for comparison within this context. It is outside the scope of this study to present an in-depth analysis of all the prehistoric settlements in Egypt. The choice of sites by the author was made according to which would contribute to the most coherent understanding of early urban society.
5. The discovery of a figurine made of lapis lazuli in the temple area near the Main Deposit provides good evidence for such contacts; see Hoffinan 1982b, 141–143; and Adams 1995, 95–96.
6. Midant-Reynes 2000, 197–198.
7. A good example of a monumental mud-brick structure is the so-called fort of Khasekhemwy, which dates to the 2nd Dynasty; see [Section 4.2.6](#).
8. For further information about the process of mud-brick making, brick sizes, and bricklaying patterns, see Kemp 2000, 79–92.
9. Rizkana and Seeher 1989, 54–56.
10. Rowan and Golden 2009, 29–33. The tradition of semisubterranean dwelling dates back to the Chalcolithic period but continues into the Early Bronze Age I period in the southern Levant. See also Rizkana and Seeher 1989, 49–56.
11. For further details about the ongoing debate on this issue, see Rizkana and Seeher 1989, who are followed by Tutundzic 1989, whereas Von der Way 1992, 3, argues for an Upper Egyptian origin.
12. This technique used for the construction of walls consists of a combination of wooden branches and twigs covered with mud plaster.
13. Midant-Reynes 2003, 245.
14. The use of adobe for tombs became prominent from the Naqada III period onward; there are exceptions, such as the famous decorated Tomb 100 at Hierakonpolis, which is an earlier example, dating to the end of the Naqada II period (Naqada IIC, ca. 3400 BCE); see Midant-Reynes 2003, 331–336.
15. Dreyer and Polz 2007. The earliest known mud-brick constructions on a large scale have been found at the cemetery of Umm el-Qa'ab at Abydos: Tomb U-j (10 m × 8 m), built for a ruler of the Naqada IIIA2 period (= Dynasty 0, ca. 3250 BCE; see [Table 4.1](#)). The practice evolved further during the Early Dynastic Period. Rulers buried at Abydos had increasingly complex mud-brick tombs of monumental scale, and there are also the funerary enclosures nearer to the floodplain at Abydos, of which the Shunet es-Zebib is the only fully preserved example, dating to the 2nd Dynasty. It measures 65 m by 125 m and was 11 m

- high. The first monumental stone architecture appeared during the reign of Djoser, during the 3rd Dynasty. For Saqqara, see Emery 1949.
16. Von der Way 1997, 170–173.
17. See, for example, the main lines for such a development in Kemp 2006, 153, fig. 55. Kemp provides a comprehensive outline for the origins of the architectural styles for which mud brick, reed matting, and stone is used, respectively. For mud-brick and matting constructions, their origins lie in settlements.
18. Dreyer 1998, 6–7, Abb. 5.
19. Tristant 2004, 119, tableau 5. The famous clay model of an early house found at the site of el-Amrah (British Museum, EA 35505) and dated to the Naqada I period most likely depicts wattle-and-daub architecture instead of mud-brick walls.
20. Von der Way 1997, 116–126.
21. Von der Way 1997, 119, Abb. 62.
22. Tristant 2004, 21. This building was excavated on the Western Kôm at Tell el-Farkha and belongs to Phase 3 of this settlement, which dates to Naqada IIIA1. It measures 6 m by 2.75 m. Traces of mud-brick walls had appeared somewhat earlier, during the Naqada IID period, but no complete outline of a house could be retrieved.
23. Chlodnicki and Cialowicz 2005, 148, fig. 5. There is not much additional precision concerning the date of the published structures.
24. Chlodnicki and Cialowicz 2005, 149, fig. 6.
25. Tristant 2004, 27.
26. Kopp 2006, 34, Abb. 15. This corresponds to the so-called Protodynastic period, or Dynasty 0. The dimension of one of the buildings is 3.5 m by 7.2 m, which compares well with the evidence from Buto.
27. Kopp 2006, 34.
28. Hoffman 1986.
29. Petrie and Quibell 1896, 54, pl. LXXXV, see also Kemp 2006, 76, fig. 24.
30. Barocas, Fattovich, and Tosi 1989; and Hassan and Matson 1989.
31. Tristant 2004, 73–75. See also Wengrow 2006, 82; Midant-Reynes 2000, 198–199.
32. Geller 1992, 23.
33. Chlodnicki and Cialowicz 2005, 145–147.
34. Cialowicz 2011, 55.
35. Chlodnicki and Cialowicz 2005, fig. 1.
36. See Friedman 2004, Baba 2008a, Baba 2009, Baba 2008b, and Hendrickx 2008.
37. Hendrickx 2008, 75–77. Similar types of vessels, but with slight variations in the shape of their bases and most likely from a different workshop, showed many traces of use when found in the tombs of cemetery HK 43, a “lower class” cemetery.
38. Friedman 2004. Takamiya 2008, who comments on this when comparing the brewing facilities in squares A6 and 7 with the installations in Operation B.
39. This connection between the two production sites of one producing the vessels to hold the liquid made in the other was still an option for Takamiya, but he was already puzzled by the difference in appearance of the two types of vessel; Takamiya 2008, 200. However, with the new analysis by Hendrickx on the rough jar vessels from Tomb 16A, this starts to make more sense; see Hendrickx 2008.
40. The large columned halls associated with the burials would provide ideal locations for ritual activities in connection with the funerary cult; see Friedman 2008c, 13–20, and Friedman 2008a.
41. After the definition by Kemp 2006, 113–135.
42. See, for example, Kemp 2006, 119, fig. 40; van Haarlem 2002 and Cialowicz 2009 for the discovery of very similar assemblages of ivory figurines.
43. Bussmann 2010, 487–488.
44. Dreyer 1986, Abb. 1, 4, 7.
45. See also Kemp 2006, 116–119, pl. 4, figs. 39–40.
46. Cialowicz 2009.
47. Eigner 2003.
48. Cialowicz 2007, 920–921.
49. Dreyer 1998.
50. For further details, see Section 4.2.5.
51. See Figure 4.32.
52. Cialowicz 2009.
53. See Cialowicz 2009, figs. 7–9, figs. 18–36.
54. See, for example, Cialowicz 2009, 84, 104–105, figs. 10–11. The complete layout of this complex has not been published yet, which makes it impossible to provide any further in-depth analysis.
55. Weeks 1971–1972.
56. Kemp 1989, 54–59, pl. 2, figs. 18–19.
57. For the full discussion of the archaeological details, see Section 4.4.
58. See note 31.
59. Cialowicz 2009, 84.
60. Ziermann 2003, Abb. 44.
61. See Ziermann 2003, Abb. 50; Kaiser 1995, Abb. 2, 4, and Kaiser et al. 1993, Abb. 1–2, and especially commented on in Ziermann 1993, 134.
62. Ziermann 1993, 134. This is the description of STO Phases I/II; see also Kaiser 1995, Abb. 2, for a plan of this area.
63. See, for example, the comprehensive analysis of the Nubian fortresses of the Middle Kingdom by Kemp 2006, 231–241. See also the discussion of these fortresses in Section 8.2.6.
64. See Section 8.2.6, Figures 8.34–8.36.
65. See de Miroschedji et al. 2001 and de Miroschedji 2001.
66. de Miroschedji et al. 2001, 84. It was built of mud bricks with an unusually large format (55 × 30 × 10 cm).
67. See de Miroschedji et al. 2001, 84. The brick module used here was slightly smaller than the previous one, measuring 45 × 30 × 10 cm.
68. The analysis of the pottery was conducted by D. Faltings; see de Miroschedji et al. 2001, 85–87.
69. See de Miroschedji et al. 2001, 80, tableau 1, for the stratigraphic sequence of the site.
70. de Miroschedji et al. 2001, 84, no. 16, 99, fig. 22.

71. Hoffman 1991, 348–354; Friedman 1997; Herbich 1998; and Friedman 1999.
72. Friedman 1999.
73. Kemp 2006, 78–86.
74. Early attestations about the geographical division of Egypt into nomes date back to the reign of Djoser in the 3rd Dynasty. It is likely that this organization has its origin in the royal domain system of the Early Dynastic Period. Helck 1974, 49–50.
75. See Hoffman, Hamrroush, and Allen 1986, who published a synthesis of the main phases in Hierakonpolis’ development during the critical periods of state formation and the emergence of complex society. The Hierakonpolis project continues under the direction of Renee Friedman; see <http://www.hierakonpolis-online.org>.
76. Quibell, Green, and Petrie 1900, pl. XXIX.
77. See, for example, Midant-Reynes 2003, 347–375; Wengrow 2006, 207–217; Kemp 2006, 83–84, for general discussions.
78. Kemp 2006, 73–78, has argued for the existence of several chiefdoms in the Upper Egyptian region, which he calls “proto-kingdoms.” Further in-depth studies of relevant material culture such as pottery and lithics seem to confirm this line of development; see Midant-Reynes 2003, 254–257.
79. At the current stage of research, Hierakonpolis is the only settlement of urban character in Egypt for which we have sufficient data to investigate the origins of settlement development from prehistoric times (ca. 3800 BCE) to the Pharaonic period (ca. 3100 BCE).
80. Hoffman 1987.
81. See, for example, Hoffman 1982b, the first interim report volume, which makes the interdisciplinary character of this research very obvious. Analyses by related disciplines such as geology, archeobotany, and archeozoology were conducted at the site in order to achieve a better framework for understanding the lives of the early inhabitants.
82. Hoffman 1982b, 2.
83. Hoffman, Hamrroush, and Allen 1986, 181.
84. Hoffman, Hamrroush, and Allen 1986, 178–181.
85. Hoffman, Hamrroush, and Allen 1986, 181–183.
86. For example, the huts investigated at HK 3; see Hoffman 1982c, 130.
87. This incorporates the following localities: HK 33, 54, 45A, 46, and 46A and covers in total an area of 20 ha, see Hoffman 1982c, 129.
88. Hoffman 1987, 2.
89. This concerns mainly the two sites at HK 11 and 14, which extend over a total area of 7 ha, see Hoffman 1982c, 129.
90. Hoffman 1982c, 123, table VI.1.
91. Hoffman, Hamrroush, and Allen 1986, 183–184.
92. In Fairservis’s report about the first two seasons at the town and temple site of Hierakonpolis, he uses the term “Kôm el-Ahmar” for the site; see Fairservis 1971–1972, 9, 14–15. This follows the original use by Quibell, who refers to an area of “burnt pottery north of the Fort”; Adams 1995, 3. Fairservis later adopts the name Kôm el-Gemuwia, which is the local modern name of the townsite situated in the floodplain.
93. Hoffman 1986. Hoffman also noted remains dating to the late Naqada IC/IIA period as having been contemporary “outliers” to the settlement in the desert; see Hoffman, Hamrroush, and Allen 1986, 181.
94. Kemp 2006, 80–81, fig. 25.
95. Friedman 2008c, 10, table 1.
96. Bunbury and Graham 2008.
97. Quibell and Green 1902, 3. Quibell and Green had already noticed severe destruction caused by sebak digging at the temple site during their work at the end of the 19th century. Walter Fairservis comments on the generally disturbed character of the archaeological remains on the surface but fails to attribute the large amount of trash containing sherds from very different periods to the sebbakhin; see Fairservis 1986, 2. He calls them “junk layers.”
98. For example, the copper statues of Pepi I that were recently restored in Cairo; see Eckmann and Shafik 2002; Eckmann and Shafik 2005.
99. Kemp 2006, 81.
100. There is much evidence that a large tell still occupied at least the western half of the site at the end of the past century, but it was completely destroyed by the sebbakhin a few years later; Clarke 1921, 60. However, a Belgium mission from Brussels started new work in this area, discovering settlement remains of the 3rd Dynasty beneath a layer of sebak debris overgrown with halfa grass; see Hendrickx, Eyckerman, and Van Winkel 2009.
101. For a more detailed presentation of the archaeological evidence, see Friedman 2004, Takamiya 2004, Takamiya 2008, Baba 2008b, Baba 2008a, and Baba 2009.
102. Hoffman 1982c, 123–125, table VI.1.
103. Hoffman 1982c, 130.
104. Friedman 2008c; see also various short reports about the latest discoveries at HK 6 in *Nekhen News* 21 (2009), 3–19.
105. In the 3rd Dynasty, offerings were still made at this site; see Friedman 2008c, 18.
106. J. F. Harlan already suggested such a possibility in 1985 – see Harlan 1985, 118, 132 – and argued against M. A. Hoffman 1982c, 130, who states that mild environmental conditions were the reason for the installations of these different sites along the wadi.
107. Hoffman 1980. The discoveries at HK 11C prompted M. Baba to take a closer look at the sherds that were kept after the earlier excavations at HK 29 and then discovered that several of them were fragments of large vats coated with food residue, reminiscent of the situation at HK 11C; see Baba 2008a, 19.
108. Hendrickx 2008, 75–77.
109. Hoffman 1980, 120–122. Hoffman conducted an in-depth survey and mapping project in this area. He notes that the settlement pattern here is influenced by the braiding patterns of a couple of wadis cutting through the desert surface. He describes the site’s appearance as a “bombed-out crater field” with piles of pottery and stones; Hoffman 1982a, 7.

110. Friedman 1994, 649, Harlan 1985, 124.
111. Hoffman 1982c, 130–132, fig. VI.1.
112. Geller 1992. He points out that the same combination of activities is frequently depicted in private tombs; one of the best examples has been found in the tomb of Ti at Saqqara, dating to the 5th Dynasty. This tradition is now confirmed to date back to the Predynastic Period, with the new discoveries at Hierakonpolis.
113. Geller 1992, 24.
114. Hoffman 1980; Hoffman et al. 1982, 7–14.
115. Hoffman et al. 1982, 10.
116. Hoffman 1982a, 12.
117. Hoffman 1980.
118. Hoffman 1980, 133.
119. Hoffman 1982a, 14. The faunal remains provide evidence for cattle, sheep, and goat but also pig and donkey, while the floral analysis showed traces of barley and wheat.
120. Hoffman 1980, 124–127; Hoffman 1982c, 13, 91.
121. Hoffman 1982a, 14.
122. Hoffman 1982c, 129–130.
123. Hoffman 1982c, 130; Hoffman 1982a, 13. Excavations revealed the presence of a vase manufacturing area utilizing basalt and Aswan granite in the form of grinding stones as well as pieces of porphyry, which are raw materials originating from different parts of Egypt.
124. Hoffman 1982c, 130; but the drill-core survey as well as excavations within the floodplain indicate that there is a certain amount of the late Predynastic town that has not been included in these calculations of the overall size. See results described in Hoffman 1986.
125. See Hoffman, Hamroush, and Allen 1986, 183–184.
126. It has been suggested that HK 29A is the result of the settlement at HK 29 gradually shifting toward the floodplain; see Friedman 1996, 16. For the most recent investigation concerning HK 29A, see Friedman 2009.
127. Friedman 1996, 24.
128. Friedman and McNamara 2008b; Friedman 2009, 83.
129. Friedman 1996, 24–29, figs. 6–10; Friedman and McNamara 2008b, 6; Linseele, Van Neer, and Friedman 2009.
130. Hikade 2008.
131. Friedman 2009, 80–83.
132. Friedman 2009, 82–83, fig. 3.
133. See Friedman 1996, 32, fig. 13.
134. Friedman 1996, 31–34; Midant-Reynes 2003, 252–253.
135. Hoffman 1982c, 130–132.
136. Hoffman 1982c, 130.
137. Hoffman 1982c, 131–136, fig. VI.1.
138. Hoffman 1982c, 132.
139. Hoffman 1982c, 123–125 table VI.1.
140. Hoffman 1982c, 132.
141. Phase V of Hoffman’s development – see Section 4.3.1.
142. Hoffman 1987, 7, fig. 6.
143. Quibell and Green 1902, 54. For sketch plans of the area showing these outliers, see Kaiser 1958, 184, fig. 1, and Hoffman 1987, 7, fig. 6.
144. Hoffman 1986, 181. Further details about the date of the pottery from these outliers are necessary in order to advance these questions.
145. Hoffman 1987, 11. Another possibility is the existence of a river levee providing higher ground. It might even have been a combination of both factors being involved in the initial choice. For the possible presence of a Nile branch in the area, see Bunbury and Graham 2008.
146. Quibell, Green, and Petrie 1900, 15–19.
147. Quibell, Green, and Petrie 1900; Quibell and Green 1902.
148. Adams 1995, 7; see also 83–99. B. Adams published some of his notes and the objects he found that are now held in the Petrie Museum. She states that Garstang worked at the temple and town together with Harold Jones in 1905/1906 on behalf of the University of Liverpool. Garstang also focused on the fort of Khasekhemui.
149. Garstang 1907, 134–136. He then discontinued his work here because of the very hard soil, which “involved the serious risk of damaging any antiquities which might be found.”
150. Garstang 1907, 133.
151. Fairservis 1971–1972, 9.
152. Fairservis 1971–1972, 15–17, figs. 9–11.
153. See Fairservis 1971–1972, fig. 10. From the published profile drawing, it is obvious that “wall B” is a later addition to the older “wall A” that is founded on a lower level. Even though the stratigraphy is described in detail, the precise date for each layer remains unclear.
154. Fairservis 1971–1972, 15.
155. Recent fieldwork at Tell Edfu provides new evidence for mud-brick structures being built directly against the town wall and using similar mud-brick modules.
156. Fairservis 1971–1972, 15. He does not provide any more details about why he identifies these protruding mud-brick stumps as “buttresses,” and they do not make much sense on the interior side of the enclosure wall. From the published sketch drawing, they seem like an abutting brick wall (see fig. 9).
157. Fairservis 1971–1972, 15. Fairservis describes this as “some kind of decorative niching or pilastering was carried out for we have units made up of 7 or 8 header bricks protruding from the wall at regular intervals (1.75 m).”
158. Fairservis 1971–1972, 16.
159. Fairservis 1986, 1.
160. Fairservis was not very familiar with Egyptian ceramics at the time, but he received substantial help from Barbara Adams for the analysis.
161. Fairservis 1986, 1.
162. Hoffman 1987; Hoffman 1971–1972, 44, fig. 9.
163. See Hoffman 1986, 12, fig. 3; Hoffman, 1987 5, fig. 5; Hikade 2004.
164. Hoffman 1986, 12, fig. 3. From the drawing, it looks as if the domestic building, especially Room C, abuts the large mud-brick wall.
165. Hoffman 1989, 318; Hoffman 1986, 6; Hoffman 1987, 6. See also more recently Hikade 2004, table 2, on this topic. The largest quantity of lithic material dates

- slightly earlier than suggested by Hoffman – namely to the Naqada IID period.
166. Apart from the possibility that it enclosed an official building of palatial character, 10N5W lies about 30 m from the so-called revetted mound structure in the temple area and could therefore well belong to some religious building too.
 167. See Fairservis 1986, 3–5, fig. 5A, Walls A, B, and C.
 168. See discussion by Kemp 2006, 121–124, who assigns this mound to his “pre-formal” temple phase. Liam McNamara, on the other hand, suggested that it functioned in relation with royal rituals, possibly the sed festival; see McNamara 2008.
 169. Parts of it were found in squares 16N7W, 17N5W–7W, 18N6W; see Weeks 1971–1972, 29.
 170. See Fairservis 1986, 14–15, for the dating of the principal stratigraphic record in this area.
 171. Fairservis 1986, 8.
 172. Hoffman 1971–1972.
 173. Weeks 1971–1972, 30.
 174. Weeks 1971–1972, 30; Fairservis 1986, 6, figs. 10 and 14.
 175. Fairservis 1986, 9, fig. 14.
 176. Weeks 1971–1972, 30. Weeks describes this pavement as “field stone pavement.” It is possible that it is a secondary addition.
 177. In the report published in 1986, Fairservis explains that he and his team had not been able to check the original plan in order to securely identify the northwestern part of the enclosure because of time limitations, but he notes the existence of a substantial wall running southeast in squares 17N5W–4W that has the same alignment as the stub wall at the northern end of the gate; Fairservis 1986, 9. From the published plan, it is possible to discern a wall in the same alignment as the stub, but it does not look much thicker than some of the other walls around it, whereas the buttressed wall running southwest of the gate certainly stands out more because of its thickness. It is clear from the published plan and the corresponding report that there were about two to three building phases for the rooms within the niched gate area, which are all shown together on the same plan; see Fairservis 1986, 7, fig. 7A.
 178. Fairservis 1986, 9.
 179. See general plan of the Early Dynastic building complex in fig. 7A in Fairservis 1986.
 180. O’Connor 1989, 85, figs. 16–17. The northern entrances of the three enclosures assigned to Djer, Peribsen, and Khasekhemwy have exactly the same entrance situation as that found at Hierakonpolis. The gate area opens into a rectangular courtyard area, which leads through an entrance on its western side into the interior of the complex. This bent-axis approach can also be seen at Hierakonpolis, where it is not possible to directly see the inner part of the building when entering.
 181. Fairservis 1986, figs. 22–23.
 182. No elevations are marked on the published plan, so the only guidelines as to the architectural details are provided by a brief description in the report itself and on illustrations showing a reconstruction of the platform; Fairservis 1986, figs. 7B and C.
 183. Fairservis 1986, fig. 7C.
 184. Fairservis 1986, figs. 22 and 23. Because of the missing elevations, it is very difficult to relate the platform to the adjacent rooms and small silos.
 185. Fairservis 1986, 8.
 186. See, for example, the Meketre model of the cattle count; Winlock 1955, fig. 13.
 187. Fairservis 1986, 13, figs. 21 and 21A.
 188. Fairservis 1986, 11–12, fig. 20.
 189. Kemp 2006, 119–121, fig. 40.
 190. Fairservis 1986, 10, fig. 18. These figures include animals (crocodile, two baboons) and human figures – notably two male figures holding a finger to the mouth. Further finds include some beads made of faience, a small limestone figure of a lion, and a miniature faience cup. These have very close parallels to figures made of ivory found at the early shrine for Satet at Elephantine but also at Tell Ibrahim Awad and Tell el-Farkha; see Cialowicz 2011 and Kemp 2006, 119, fig. 40.
 191. The dimensions of “Room D” are about 6.4 m long and 4.3 m wide. The southeastern side was left open, leading into a corridor (D1) where another group of hearths with “pot chimneys” was found. It is therefore very likely that Room D was an open courtyard without roof. There has also been no evidence for the presence of any column bases, and it would have been difficult if not impossible to roof this room without any additional support.
 192. Fairservis 1986, 125–129, 221.
 193. Weeks 1971–1972, 31, figs. 39 a, c, and d. According to P. Kaplony, they date to the late 2nd or early 3rd Dynasty.
 194. O’Connor 1992, 87. O’Connor compares the size and layout of various known mud-brick enclosures from the Early Dynastic Period, notably those from Abydos, and recognizes a certain similarity to the “palace façade” gate and its enclosure, which leads him to conclude that any other purpose except for a religious function of this building is unlikely. However, the archaeological evidence does not confirm this.
 195. Fairservis 1986, 14–16. His description of the various levels and their dates are certainly adequate for the preliminary reports about his results, and the final publication about this excavation never took place, which is regrettable. The complete absence of any photographs from the excavation in his reports and articles is also very unfortunate.
 196. Unless more evidence comes to light for this building having also functioned as the residence of a king or local ruler, mayor, governor, or the like, I would prefer to use the more neutral terminology of “administrative” or “official” building complex for this structure.
 197. Ritner 2008, 183–184.
 198. Weeks 1971–1972, 31; Fairservis 1986, fig. 28.
 199. R. Friedman, pers. comm. (May 25, 2011).
 200. See the schematic plan of the stratigraphy as published by Fairservis 1986, fig. 28. The last phase of use seems to be associated with early Old Kingdom pottery.

201. Kemp 2006, 83–84, 121–124, fig. 41. For the revetted mound, see also McNamara 2008.
 202. Hartung 2008 ; Hartung et al. 2007, 72–81.
 203. Hartung 2008, 1195–1197. Hartung provides a detailed summary of the textual material and what can be learned about the status of Buto.
 204. Hartung et al. 2009, 179–180, Abb. 31. Hartung remarks on a gap between the northern part of the site and a smaller part to the south, which could be an explanation for the two toponyms of Pe and Dep.
 205. Petrie 1905, 36–38.
 206. Von der Way 1997.
 207. Faltings 1998.
 208. Hartung et al. 2009, 170–188.
 209. Hartung 2008, 1200–1204, figs. 6 and 7. This strip is about 150–200 m wide.
 210. Hartung 2008, 1204–1205, figs. 7 and 8.
 211. See Hartung et al. 2007, Abb. 4, and Hartung 2008, 1212, fig. 13, for the most recent reconstructions of the whole layout. In the latter plan, it is hypothesized that next to the excavated remains of the westernmost area another one existed, which seems a probability given the overall symmetric arrangement of the large north–south dividing walls.
 212. No evidence for any door at the gate has been found; Hartung et al. 2007, 73.
 213. During the excavation by Hartung as well as the earlier fieldwork by Von der Way, such changes and additions were observed, especially in the magazine area of the easternmost area but also in the area to the west; see Von der Way 1997, 142–145.
 214. See, for example, the group of rooms numbered 1–4 on Abb. 81 in Von der Way 1997 and walls M230 and M231 in square E6 in Hartung et al. 2007, Abb. 2. Von der Way calls this layout “corridor principle”; see Von der Way 1997, 138–139.
 215. Only one door socket has been found in room 17, while all the others show no traces of doors; see Von der Way 1996, 249.
 216. For example, rooms 8–13; see Von der Way 1997, Abb. 81. Von der Way calls this the “barrier principle”; see also Von der Way 1996, 249.
 217. Kaplony 1992.
 218. Hartung 2008, 1213.
 219. Von der Way 1997, 155–159, Abb. 95–104, and Von der Way 1996, 251–252.
 220. Von der Way 1997, 172–173; see also no. 1058. He refers to a comment by Kemp about the Hierakonpolis building complex being unreliable evidence because the internal mud-brick walls were not contemporary to the palace-façade gate. A closer look at Kemp’s plan of this building shows that what he meant was that certain areas within its interior were not contemporary – which he therefore omitted in his plan – but the majority of the walls were and permit an interpretation about the function and layout of this complex; see Kemp 2006, 82–83, fig. 26.
 221. The Early Dynastic settlement at Elephantine does not show any characteristics comparable to those of the two building complexes excavated at Buto and Hierakonpolis but is of a much simpler kind; see Ziermann 2003.
 222. See also Hartung 2008, 1213. The identification as “palace” is still problematic because no evidence for any royal connection has been found in this settlement phase. Hartung and von der Way both toyed with the idea of identifying this complex with the “Palace of the Harpooning Horus,” which was a royal estate at the time of Djer, but Hartung correctly emphasizes that thus far no concrete evidence from Buto itself for this identification has been discovered.
 223. Hartung et al. 2009, 179, no. 292.
 224. Hartung et al. 2009, 177.
 225. See discussion in Seidlmayer 1996a, 112.
 226. Seidlmayer 1996b.
 227. Few traces of a late Early Dynastic/early Old Kingdom administrative building have been found on the western island; see Section 5.4.1.1, Figure 5.33.
- ## 5 THE SETTLEMENTS OF THE OLD KINGDOM
1. Willems et al. 2009; Willems 2009. Only a few architectural remains have so far been uncovered, which currently does not permit the full evaluation of the layout and organization of this site.
 2. Willems et al. 2009, 322–323.
 3. See Tallet and Marouard 2012, Tallet 2012, and most recently Tallet and Marouard 2014.
 4. This has recently been demonstrated further by several papyri discovered at Wadi El-Jarf, which contain a logbook of an inspector called Merer, who was in charge of obtaining fine limestone from the quarries at Tura for the outer casing of the great pyramid at Giza; see Tallet forthcoming.
 5. See Section 4.3.
 6. See, for example, Seidlmayer 1996a and Ziermann 2003.
 7. Moeller 2003; Moeller 2005a.
 8. Marchand 2004; Marchand and Laisney 2000.
 9. O’Connor 2009; Adams 1998.
 10. Hendrickx, Eyckerman, and Van Winkel 2009.
 11. Quibell and Green 1902, 16–20.
 12. For Kôm el-Hisn; see Wenke et al. 1988 and Cagle 2003.
 13. For Mendes, see Adams 2007.
 14. Hartung 2008.
 15. Eigner 2003.
 16. Soukiassian, Wuttmann, and Pantalacci 2002; Soukiassian 1997 and Soukiassian, Wuttmann, and Schaad 1990.
 17. Mills and Kaper 2003; Mills 2002a.
 18. See discussion on the problems of Old Kingdom settlement preservation because of the thick floodplain accumulations at Section 3.2.
 19. Stadelmann 1997; Lehner 1997.
 20. Kemp 2006, 186, fig. 65. He provides a good overview of the many installations and construction features in the Giza region. See also Lehner 1985b and Lehner 1985a.
 21. Tallet and Marouard 2014, 8–12; Tallet forthcoming.
 22. The current location of Ra-She-Khufu is not known.

23. Recent investigations into the geomorphology and change in river course by Judith Bunbury and David Jeffreys have shown evidence for the apex of the Nile having been situated further south in ancient times; see Bunbury and Jeffreys 2011.
24. For a first critical review of these categories, see Bussmann 2004.
25. Stadelmann 1981; Bussmann 2004, 34–36.
26. See discussion at Section 5.2.4.
27. The royal mortuary complexes from early 4th Dynasty onward include (a) the royal pyramid and (b) the temple directly attached to the eastern side of the pyramid, which in turn was linked via a (c) causeway to the (d) Valley Temple located at the desert edge next to the floodplain; see also Lehner 1997, 18–19.
28. All of these installations were part of royal funerary complexes.
29. Bussmann 2004, 33–34, tab. I.
30. Valloggia 2011, 25–35.
31. Valloggia 2011, 68–70.
32. Valloggia 2011, 70–73.
33. Valloggia 2011, 71.
34. Valloggia 2011, 72–73.
35. These finds significantly resemble the repertoire found at the settlement linked to the Valley temple of Snofur at Dahshur.
36. There might have been a break during the 5th Dynasty, because no pottery dating to this period has so far been identified. This would also mirror a development seen at other sites in the Giza region.
37. Valloggia 2011, 70.
38. Valloggia 2011, 56–58.
39. See Verner et al. 2006, 24, fig. 1.1.21.
40. The so-called early temple, made in limestone, is the only stone building that was to some degree completed.
41. Verner et al. 2006, 72–73.
42. Verner et al. 2006, 77. Verner states that foundation of the priests' settlement within Raneferef's pyramid temple was related to the fact that there was no Valley temple that would usually have attracted such secondary settlement.
43. Borchardt 1909, 36–37; Verner 1982, 162–163.
44. See, for example, the large number of discarded sealings at the Pottery Mound at Giza, as discussed in Section 5.2.2.1.4.
45. Bussmann 2004, 33.
46. Valloggia 2011, Planches, 44, fig. 81.
47. Posener-Kriéger 1976, 565–574; Roth 1991, 77–89.
48. Roth 1991.
49. Lehner and Sadarangani 2007.
50. Borchardt 1909, 11–12.
51. Valloggia 2011, Planches, 167, fig. 255.
52. Faltings 1989.
53. Stadelmann et al. 1993, 293, Abb. 221, Taf. 60a–b.
54. It might not be possible to ever fully explore the entire settlement area, as parts are under the modern settlement and cemeteries.
55. See general overview of the eastern part of Giza in AERA 2011, 6.
56. Nolan 2010a.
57. House Units 1 and 2 have been excavated; see Section 5.2.2.1.3. for details.
58. Lehner and Sadarangani 2007.
59. Abd el-Aziz 2007.
60. Nolan and Heindl 2011.
61. Lehner and Sadarangani 2007, 65–66.
62. Lehner and Sadarangani 2007, 66.
63. For further information on the possible occupations of the gallery complex, see Lehner 2004a and Lehner 2004b.
64. Redding 2007a. The absence of any wild fauna and pigs suggests that the inhabitants of the galleries were not actively involved in farming or herding. Pigs have been considered a good source of protein for both rural and urban populations. For example, in the Eastern Town at Heit el-Ghurab, there is evidence for the consumption of pig.
65. Lehner 2011a.
66. Lehner, Kamel, and Tavares 2009a, 14–16.
67. Lehner, Wetterstrom, and Hawass 2007, 45. It might have aided in the preservation of the grain.
68. Lehner, Kamel, and Tavares 2009b, 59–65. The whole RAB complex consists of two distinct architectural phases.
69. Lehner and Tavares 2010. This part of the site was also marked by several perimeter walls and pathways, which indicates a certain level of access control.
70. Kawae 2009, 90, fig. 37. The platform was modeled in a way that resembles a bed with a footrest; see also Figure 6.7 in Section 6.2.5.
71. The exact location of the main entrance into House Unit 1 seems to be covered by debris from the Pottery Mound and has not yet been excavated. Another possibility for an entrance would be from the northern side but the preservation of the walls has not been very good here.
72. Lehner 2011a, 138–139, fig. 14.3.
73. See Redding 2007b for further details.
74. Redding 2007b. The ratio between cattle and sheep/goat is much more elevated at 14:1 in comparison with the rest of the settlement, where it lies at 0.4:1!
75. Kawae 2009, 90–91.
76. Nolan 2010a, 249–271.
77. Kawae 2009. These could also be linked to the large number of discarded beer jars in the Pottery Mound if they had functioned as storage magazines.
78. Nolan 2010a, 85–86.
79. There is evidence for sealing clay among the fill of the Pottery Mound, suggesting that objects were being sealed. In addition, at least one of the officials identified from the sealings was responsible for sealing doors as well, which means he was local.
80. For more details on this enigmatic building, see Lehner 2009; Lehner and Wetterstrom 2007.
81. Lehner, Wetterstrom, and Hawass 2007, 45.
82. Tavares 2011, 217.
83. Redding 2011.
84. The Eastern Town might have continued to be inhabited slightly longer, possibly into the 5th Dynasty; Mark Lehner, pers. comm. This would fit well with the interpretation of its

more self-sufficient and independent character in comparison with the character of the remainder of the settlement.

85. Saleh 1974.
86. They are 15 m long and 5.5 m wide; see Saleh 1974, 134, Taf. 22 b–c.
87. They look similar to the workhouse at Dahshur, which has been excavated near the Red Pyramid; see Faltings 1989.
88. See Saleh 1974, Taf. 28 a–d. Lehner also comments on the similarity between the two installations; see Lehner, Kamel, and Tavares 2009b, 40.
89. See the rather vague description by Saleh 1974, 135; see also Taf. 23 c.
90. For identification of the purpose of these pedestal installations, see Lehner and Wetterstrom 2007.
91. Although the temple is not situated at the edge of the Nile Valley, it is linked via a long causeway to the pyramid complex further to the west, which is one of the characteristic features of Valley temples in general. With regard to this observation, it might be justified to keep the name “Valley temple” complex for this installation in the context of this chapter. See also Stadelmann 2011, who argues for a *heb-sed* (jubilee) festival function of the temple.
92. This rather unusual orientation, which differs from the later examples that are always orientated to the west, has been interpreted as a possible sign for this temple having also functioned for the cult of the neighboring Red Pyramid of the same ruler; see Stadelmann 1997, 98.
93. Fakhry 1961b, 9–15, fig. 4.
94. Fakhry 1961a, ch. VIII to XI. There is no evidence for any cult activity at the temple for the First Intermediate Period, contrary to Simpson, who dates some pottery to this time span. All the available evidence indicates that the site was temporarily abandoned at the end of the 6th Dynasty.
95. Fakhry 1952, pl. VII b. The caption to one of the photographs taken of this area explains the two phases of occupation, but it is not possible to distinguish from Fakhry’s plan any alterations made to these buildings or whether these were rebuilt or restored walls. The plan, which is published in his report from 1952, is almost identical to the plan of his final publication from 1961!
96. W. K. Simpson, who published the pottery corpus, points out that he was not able to conduct a stratigraphic examination of the pottery dumps according to later disturbances of the site; see Fakhry 1961a, 103–140.
97. This has also been noted by Bussmann 2004, 19. A close comparison of the pottery published by W. K. Simpson in Fakhry 1961a, 103–140, with the ceramic material from the mastaba of Netjer-aperef (who was a contemporary of Snofru) confirms clearly the overall lack of typical early 4th Dynasty forms at the temple site. For a detailed analysis of the pottery from Netjer-aperef’s mastaba, see Alexanian 1999, 120–166.
98. Fakhry 1961a, 106. This choice makes much sense in view of the time restrictions but also with regard to published parallels. In the early 1960s, there was much more available in terms of Old Kingdom pottery publications – for example, by Reisner from Giza and Kaiser’s pottery found at the sun temple of Userkaf of the 5th Dynasty.
99. Fakhry 1952, fig. 1; Fakhry 1959, 73–75, fig. 37, pl. XXV.
100. Fakhry 1959, 74.
101. Fakhry 1961a, 8, pls. XLI and XLII. Numerous flint implements for sickle blades, borers, and scrapers have been found, as well some larger stone tools, but no precise find spots were marked by Fakhry.
102. See, for example, the role of various priests and other inhabitants described by Posener-Kriéger 1976, 547–577, based on the Abusir papyri.
103. Fakhry 1961a, 13–14 and 106.
104. Her exact genealogy and especially her role as queen and queen mother are discussed in detail by Nolan 2010b.
105. Recently a 3-D scan was made of this monument; see Kawae 2007 and Kawae et al. 2009 for further details.
106. Hassan 1943, 37. He provides a short description of the organization and sizes of these magazine rooms but does not mention any further evidence as to their precise function.
107. Hassan 1943, 35.
108. Hassan 1943, excavation map.
109. For recent discussion of the site as it was published by Hassan, see, for example, Bussmann 2004, 27–29; Arnold 1989; Kemp 2006, 205–207, fig. 73.
110. Hassan 1943, 38.
111. See Lehner 2011b, 13–92, including further references.
112. Lehner et al. 2011, 175–191; Lehner, Kamel, and Tavares 2009c, 9.
113. Yeomans and Mahmoud 2011, 43.
114. Nolan 2010b; Yeomans and Mahmoud 2011, 43. In this early phase, the relationship to building M is not clear.
115. Nolan 2010b, 11.
116. This part of the settlement was only discovered in 2011, and its exact chronological phasing has not been published yet, but it was contemporary to the Khentkawes settlement. For a first report of the newly discovered buildings to the east of the basin, see Lehner 2011d, 10–13.
117. Lehner et al. 2011, 186–187. However, the gigantic stone blocks used for the construction of the Khentkawes monument and the Menkaura temple could not have used the terraces and corridors at the basin so there must have been a different access ramp.
118. Hassan 1943, 39–40.
119. Hassan 1943, 41–42.
120. Arnold 1989.
121. Unfortunately, we know very little on how such decision making took place and who the persons involved were.
122. Jones 2011, 19, fig. 3.2.
123. For example, by Arnold 1989, 2–18, who echoes a modern architect’s view of the genesis of this settlement.
124. Kemp 1989, 289–291, fig. 96. The temple bakeries at Amarna are a fascinating example of the multiplication of a domestic-type bakery into large rows of units with an identical internal organization.

125. Such an idealized concept of town planning was proposed by Arnold 1989, 17–18.
126. Yeomans and Mahmoud 2011.
127. See Lehner 2011c, 88–92, and Lehner et al. 2011, 178–179, for further details. This phenomenon probably had a much more widespread effect, which needs to be investigated further. It is possible to date this climatic change to the late Old Kingdom because of the resettlement of KKT and MVT.
128. For further details concerning the layout of house E, see Section 6.2.1.
129. Reisner et al. 1931, Joint Egyptian Expedition of Harvard and the Boston Museum of Fine Arts, plan VIII.
130. AERA 2011, 12–13.
131. AERA 2011, 11–12.
132. AERA 2011, 12. The alabaster column bases of both vestibules were almost identical in size and finishing.
133. Kemp 2006, 207–209, fig. 74.
134. Lehner et al. 2011, 178–179.
135. While Unas, last king of the 5th Dynasty, is not attested at the Menkaura pyramid temple complex, Teti, first ruler of the 6th Dynasty, is. The largest gap of kings attested at the Menkaura complex seems to be concerning the earlier 5th Dynasty. See also Lehner et al. 2011, 176.
136. Lehner et al. 2011, 178; AERA 2011, 10–11.
137. Lehner 2010, 8–13.
138. See Lehner 2010, 10–11. There is evidence for the continuous upkeep and maintenance of this ramp, which can be seen in the multiple sublayers of surface renewal using Nile silt that added up to a thickness of 60 cm!
139. Lehner 2010, 12. The water tank was made of a terrace slope, which can be divided into four levels according to the masonry-lined walls and has a depth of 3.8 m. Lehner estimates that if the tank was filled up to its maximum level (level 1) it was able to hold 132,100 liters of water! However, the presence of a drain along its side suggests that the tank was generally filled to a lower level (level 3 according to the masonry lines), which would be about 6,100 liters.
140. Hassan 1943, 41.
141. See Erman and Grapow 1928, 211, no. 6.
142. The topic has been treated by various authors; see, for example, Stadelmann 1981 and Helck 1957 and Bussmann 2004.
143. Arnold et al. 2003, 188. This view is mainly based on the articles by Stadelmann and Helck (cited above). Bussmann also follows closely the definition provided by Arnold in his recent analysis of settlements in the contexts of pyramids.
144. For example, the detailed Dahshur decree by Pepi I; see Borchardt 1905; Goedicke 1967; and Strudwick 2005, 103–105, and more recently Fettel 2010, 146–148. The other frequently cited decree was made by Pepi II for the pyramid town of Menkaura at Giza; see Strudwick 2005, 106–107.
145. See also the detailed analysis by Helck 1957, which provides an excellent overview regarding the titles of the inhabitants.
146. See, for example, Goedicke 1967, 55, 148, for the Dahshur decree of Pepi I and the decree of Pepi II from the Valley temple of Menkaura.
147. See, for example, Helck 1957, 91. Helck refers to the artisans and workers mentioned in connection with a pyramid town on legal documents concerning the sale of a house where various people have been identified as being members of a pyramid town. This was further commented on by Stadelmann, who states that the origins of pyramid towns were workers' settlements; see Stadelmann 1981, 67–68, for a detailed outline on this issue.
148. For the exact find spot of the Dahshur decree, see the description given by Borchardt 1905. For the discovery of Pepi II's decree at the MVT, see Reisner et al., 1931, 280.
149. See Pantalacci 1985.
150. Goedicke 1967, 16.
151. Goedicke 1967, 56: "Die Majestät befahl, daß man nicht pflügen lassen soll irgendein Feld dieser beiden Pyramidenstädte als Unterhalt von den Hörigen irgendeiner Königin, irgendeinem Königsabkömmling, irgendeinem *semr* oder Magistraten, außer von den *khenti-sche* dieser Pyramidenstadt."
152. See Goedicke 1967, 56: "Die Majestät befahl, daß nicht irgendeine Person, die bei den friedlichen Nubiern war, eintreten soll, um Priester zu sein, um den Monatsdienst zu verrichten, um irgendwelche Anteile zu essen im Heiligtum dieser Pyramidenstadt."
153. The hieroglyphic sign for "town" is known to have been used for a multitude of different sizes and types of settlements and cannot be used as evidence for designating a specific size or rank, which was already noted by Bietak 1979, 98–100.
154. Alexanian and Seidlmayer 2002, 19–27, Abb. 13–15. The size of this settlement has been estimated to lie around 2.6 ha; see Bussmann 2004, 32 tab. I.
155. Borchardt 1905.
156. Kemp 2006, 208–209, fig. 74.
157. See Arnold et al. 2003, 188. Bussmann also draws a close comparison between Lahun and the Khentkawes town; see Bussmann 2004, 36.
158. Stadelmann 1981, 72.
159. Lehner et al. 2011, 187–191.
160. Lehner et al. 2011, 178–182.
161. See, for example, the comment made by J. Krejci in relation to the mud-brick masonry at the Raneferef complex; Verner et al. 2006, 40. It is important not to forget that the main building material used for royal palaces was also mud brick, a fact that puts these preconceptions into a much better perspective.
162. Saleh 1974, 133.
163. Valloggia 2011, 68–73.
164. Borchardt 1909, 36–37.
165. Fakhry 1961b, 9–15; Jéquier 1978.
166. Borchardt 1909.

167. Valloggia 2011, 73. There are two phases of occupation that date to the 4th Dynasty and one attributed to the 6th Dynasty.
168. Verner et al. 2006, 71.
169. Verner et al. 2006, 70–71.
170. Lehner et al. 2011, 177–180.
171. Vymazalova 2010, 301–302.
172. Lehner and Tavares 2010.
173. Lehner, Kamel, and Tavares 2009a, 37. This seems to concern specifically the Western Town.
174. See, for example, Fettel 2010, 245–248, 279–282.
175. Tavares 2011, 272. The continuation of settlement remains has been estimated to stretch for about 3 km to the east from the Heit el-Ghurab site.
176. See Section 1.3.
177. Kemp calls it a “workers’ camp” but mainly refers to the Gallery Complex without specifying the character of the settlement any further; see Kemp 2006, 188–190. Bussmann classifies it in similar terms as “Arbeitsiedlung”; Bussmann 2004, 29.
178. Tavares 2011, 275.
179. Contra Bussmann 2004, 33.
180. See, for example, Jeffreys 1996.
181. Jeffreys and Tavares 1994, 155–156, fig. 15. Nowadays, Memphis lies to the west of the Nile.
182. See sketch map by Kemp 1977, fig. 7, which shows the concentration of buildings from various periods in their respective locations at the complete site.
183. A site with a similar complex occupational history is Buto. The recently conducted drill-core survey has immensely improved our understanding of these shifts within the settlement over long periods of time; see Hartung et al. 2007 and Hartung et al. 2009.
184. Lilyquist 1974; Kemp 1976; and Jeffreys 1985, 28, pl. 7.
185. See Kemp 1976; Kemp 1977, 194; and Jeffreys 1985, 28. The presence of Old Kingdom sherds certainly suggests a settlement nearby. D. Jeffreys remains cautious, though, because during his excavations of New Kingdom levels at Kôm Rabi’a, residual Old Kingdom sherds also occurred; Jeffreys and Tavares 1994, 154–155. This can also be confirmed by the author, who participated in a study season at Memphis in 2000 – analyzing pottery from Middle Kingdom contexts – where the same residue of Old Kingdom sherds was noticed. Most of them were rather small and showed signs of weathering. They might have come from disintegrated mud bricks, which often contain small sherds when soil from archaeological layers was used for brickmaking.
186. Kemp 1976, 28.
187. Tavares and Kamel 2012. See also Section 8.1.
188. Love 2003.
189. See, for example, the reconstruction of the Giza landscape by Lehner 1985a.
190. M. Lehner, pers. comm.
191. See discussion by Alexanian and Seidlmayer 2002, 25–26; Verner 2012.
192. Vymazalova 2011.
193. Wenke et al. 1988.
194. See Adams 2007, 100–102. Adams mainly focuses on the stratigraphic evidence. Few architectural remains are presented in his dissertation in depth, which does not allow for any wider analysis of this site in the context of this study. See also his interim report about the 1999–2005 seasons at Mendes; Adams 2009.
195. See van Haarlem 2000, who provides a detailed description of the site and explains the bad preservation of any settlement remains. For the evolution of the temple, see Eigner 2003.
196. Hartung et al. 2009, 86–87, Abb. 2.
197. Hartung et al. 2009, 180, Abb. 31.
198. See Section 1.3 for a detailed definition within this context.
199. Moeller 2005b.
200. See Section 7.3.1 for a more detailed discussion on this settlement.
201. Willems et al. 2009, 313.
202. Willems et al. 2009, 324.
203. Kemp 1985.
204. See Moeller 2003; Moeller 2004. The excavations of a larger area with Old Kingdom remains started in fall 2012, and therefore only preliminary results can be included, which mainly concern the general development of the town at the end of the Old Kingdom into the First Intermediate Period see Section 7.4.3 for further details.
205. For a detailed study of the textual data from the site, see Fischer 1968. Some archaeological remains for the late Old Kingdom are mentioned in Marchand and Laisney 2000 and Marchand 2004.
206. Both Abydos and Dendera will be dealt with in depth in Sections 7.4.6 and Sections 7.4.7 because much more is known about the First Intermediate Period occupation than that of the Old Kingdom. For some limited information on the Old Kingdom settlement, see Kemp 1977, 186–189, and Adams 1998.
207. This might also be linked to the height of the annual Nile flood; see Seidlmayer 2001, 81–87.
208. See Section 4.5.
209. Dreyer 1986.
210. Bussmann 2010, 494–495.
211. See discussion by Bussmann 2010, 26–27.
212. Kemp 2006, 116–121.
213. Pätznick 2001; Pätznick 2005.
214. Seidlmayer 1996a, 119–124; Papazian 2012, 51–54.
215. See also Marouard and Papazian 2012.
216. The bricks for the main building have a length of 37 cm, which is much larger than the usual 25–27 cm length; see Spencer 1979, 147.
217. Jones 2000, 410; see also Seidlmayer 1996b, 199, Abb. 3.
218. Seidlmayer 1996b, 198.
219. Pätznick 2001.
220. Seidlmayer 1996b, 200.
221. Faltings 1998, 83–88. These trays are used for a kind of flatbread called *aperet*. Depictions of the production of this

- type of bread have been found in Old Kingdom tomb scenes.
222. Seidlmayer 1996b, 202–205, Abb. 4.
223. Marouard and Papazian 2012, 8, fig. 5.
224. No archaeological remains for such a facility have been found on the western island, and as can be seen already with the administrative building here, the preservation of any early Old Kingdom remains is not good due to all the later settlement and cemetery activity above it.
225. Seidlmayer 2005.
226. For the detailed publications of the final report concerning this work, see Ziermann 1993 and Ziermann 2003.
227. Kaiser 1999, 72, Abb. 2.
228. Kaiser 1999, 77.
229. Kaiser 1999, 75–76, Abb. 3.
230. Kaiser 1999, 77, Abb. 2 and 3.
231. Kaiser 1999, 79–80.
232. Kaiser 1999, 81. No plan of this building has been published.
233. See Section 6.3.
234. Dreyer et al. 2002, 174–177.
235. Dreyer et al. 2002, 178–182.
236. Dreyer et al. 2002, 181.
237. Dreyer et al. 2002, 178–182.
238. von Pilgrim 2006, 403.
239. For this reason, the governor's palace at Elephantine will be dealt with in depth in Section 7.4.1.
240. For the details about a spectacular discovery of two major deposits of cult objects related to the veneration and cult of Heqaib and other governors, see Section 7.4.2.
241. Dreyer et al. 2002, 164.
242. In several deep trenches dug into stratified settlement layers that had survived the sebak digging, further remains of larger, well-built mud-brick walls have been found that, according to the excavators, were possibly of official character; see von Pilgrim 2006, 406.
243. For example, the recent excavation at the capital of the 2nd Upper Egyptian nome at Tell Edfu has provided new evidence to the presence of a governor's residence and administrative quarters along the eastern part of the tell. These date back at least as far as the late Old Kingdom and continued to prosper until the end of the 17th Dynasty (Second Intermediate Period); see Moeller 2010.
244. Tallet and Marouard 2012; Tallet 2012.
245. Tallet and Marouard 2012, 2.
246. Soukiassian, Wuttmann, and Schaad 1990; Soukiassian, Wuttmann, and Pantalacci 2002; Jeuthe, Le Provost, and Soukiassian 2013.
247. Mills and Kaper 2003.
248. Publications in the form of final reports have so far covered the pottery workshops (see Soukiassian et al. 1990), the *ka*-chapels, and their outbuildings (see Soukiassian, Wuttmann, and Pantalacci 2002 and Fathy et al. 2013). Another site report focuses on the workshop area situated in the southern part of the palatial complex; see Jeuthe 2012. For preliminary overviews about the ongoing work, see Soukiassian et al. 1990; Soukiassian, Wuttmann, and Schaad 1990; Soukiassian 1997; and most recently Jeuthe, Le Provost, and Soukiassian 2013.
249. This link has also been suggested by A. Dorn in his article about the cult objects found in the governor's palace at Elephantine; see Dorn 2005, 131, 135–136.
250. The indigenous population of the oases did not show any evidence for permanent settlement; see, for example, McDonald 2002.
251. Jeuthe, Le Provost, and Soukiassian 2013, 204.
252. Jeuthe 2012, 29.
253. The inner enclosure covers an area of 200–210 m in a north–south direction and 63–68 m east to west. It has a thickness of 1.6–1.75 m. The outer enclosure stretches 216–242 m from north to south and about 100 m east to west, with a thickness of 2.5 m; see Jeuthe, Le Provost, and Soukiassian 2013, 204.
254. Jeuthe 2012, 28, 34 Abb. 2.
255. Soukiassian, Wuttmann, and Pantalacci 2002, 9–10, fig. 2; Jeuthe 2012, 30.
256. See also the discussion about the term “palace” in Jeuthe 2012, 23–28.
257. Jeuthe 2012, 14; and most recently Jeuthe, Le Provost, and Soukiassian 2013.
258. The continued presence of governors at Ayn Asil has been confirmed also by the mortuary evidence, such as the stela of Desheru III marking a phase of reoccupation of mastaba M I/B; see Fathy et al. 2013, 136–137. Also noteworthy in this respect is the decorated tomb of Betju; see Pantalacci 2005, 475, fig. 34.
259. They are dealt with in more detail in Section 7.5.
260. For the various phases of occupation and their chronological order, see also Jeuthe, Le Provost, and Soukiassian 2013.
261. For a detailed discussion of the layout of these apartments, see Section 6.4.
262. Pantalacci 1998, 304.
263. Pantalacci 1998; Soukiassian, Wuttmann, and Pantalacci 2002, 331–334.
264. Jeuthe 2012, 30.
265. Jeuthe, Le Provost, and Soukiassian 2013, 204 no. 10; Soukiassian 2013, 12–13, Fig. 1.
266. Fathy et al. 2013, 5.
267. Jeuthe 2012, 31, Abb. 2; Jeuthe, Le Provost, and Soukiassian 2013, 205–206.
268. Soukiassian, Wuttmann, and Pantalacci 2002, 310–316.
269. Förstner 2007.
270. Pantalacci 1997.
271. Soukiassian et al. 1990.
272. Castel, Pantalacci, and Cherpion 2001; Castel et al. 2005; Fathy et al. 2013, 85–161.
273. See, for example: Mills and Kaper 2003; Smekalova, Mills, and Herbich 2003; and Mills 2002b, with further bibliography.
274. Mills and Kaper 2003, 125.
275. Remains of a buttressed enclosure wall have recently been discovered at Tell Edfu, which seems to date to the 4th/5th Dynasty; more details about this discovery are expected in the near future.

276. Mills and Kaper 2003, 125–127.
 277. Mills and Kaper 2003, 127.
 278. Mills 2002b.
 279. Mills 2002b, 28.
 280. Mills 2007, 5. The author mentions the presence of Meidum bowls that show characteristics of the 4th and 5th Dynasties, such as the lighter orange-colored slip, burnished, and the restricted shape with a sharp carination. However, the pottery analysis is not yet completed, and the origins of the bakery area must remain to some extent uncertain. The 5th Dynasty occupation is nevertheless evident.
 281. Mills 2007, 5–6.
 282. Mills and Kaper 2003, 127.
 283. See Section 6.5 for a detailed description of the inner layout.
 284. Mills 2007, 7.
 285. Mills and Kaper 2003, 128 fig. 2.
 286. Mills 2007, 1, 7. The excavators did not exclude the possibility that it could have been a small sanctuary, but no finds have been made that would support this suggestion.
 287. The foundation of the square fortress is currently being dated to the 6th Dynasty; see Jeuthe 2012, 29.
 288. Mills 2007, 1; see also Förstner 2007, 8–9, 17, fig. 5.
 289. Mills 2007, 1, 8–11.
 290. Smekalova, Mills, and Herlich 2003, 132–135, figs. 1–2.
 291. Kuper and Förstner 2003.
 292. Bussmann 2010, 115–130.
 293. Lehner and Tavares 2010, 213.
 294. Wirth 2000, 325–327, 333.
 295. Wirth 2000, 326.
 296. This intermingling of communities has already been remarked upon also by M. Lehner; see Lehner 2011e, 40–41.
- ## 6 THE LAYOUT OF OLD KINGDOM HOUSES
1. Wenke et al. 1988, 15 fig. 5; Cagle 2003, 251.
 2. See Section 9.1.1 for details.
 3. *L* has been chosen to designate the principal “living” rooms that were also used for sleeping and other daily life activities.
 4. Some authors have interpreted these central rooms with niches at the rear as reception rooms where the house owner would be seated in the niche and receive guests; see, for example, Ziermann 2002, 40–42, and Kaiser et al. 1999, 71–81. This interpretation, however, seems to be mainly inspired by the evidence from the Middle Kingdom and the houses at Amarna. In view of findings from the recent excavations at the settlement of Heit el-Ghurab at Giza, there is much evidence for these niches having been equipped with bed platforms; see discussion by Lehner and Sadarangani 2007, 38–40.
 5. *O* stands for “outbuildings.”
 6. When Selim Hassan excavated this settlement, he did not conduct a detailed stratigraphic analysis but mainly focused on revealing the architecture. He believed that the whole site was the result of one building phase dating to the end of the 4th or the beginning of the 5th Dynasty; see Hassan 1943, 49.
 7. Wodzinska 2011.
 8. Arnold 1989, 10–16, but also Hassan 1943, 38.
 9. Hassan 1943, 42–44. He provides a list of objects that he found in the fill of the houses, but clay sealings do not feature among them. The finds cover a wide range of objects dating to different periods. It is not possible to be sure which things were in fact from the Old Kingdom occupation. The numerous flint implements, grinding stones, and other tools that are listed are probably the best candidates for objects that come from the original occupation.
 10. Lehner 2011, 39.
 11. Lehner 2011, 36–39.
 12. Hassan 1943, 35. He states that he did not see any traces of a staircase when excavating the settlement.
 13. Hassan 1943, 38. He does not provide any details about the type of jars he identifies as “water jars.” Felix Arnold mislabels this room and assigns the water jars to the small rectangular room next to the corridor (80); see Arnold 1989, 10. This was then followed in the report by Yeomans and Mahmoud 2011, 50.
 14. Yeomans and Mahmoud 2011, 46, fig. 7.3.
 15. Yeomans and Mahmoud 2011, 48–49; see fig. 7.7.
 16. Ash deposited around and under mud-brick silos was a commonly used measure to protect the stored goods from insects; see Yeomans and Mahmoud 2011, 49.
 17. Lehner et al. 2011, 158–159; Yeomans and Mahmoud 2011, 50–51, fig. 7.8.
 18. Lehner et al. 2011, 175.
 19. Wodzinska 2011, 173–182.
 20. Wodzinska 2011, 174.
 21. Lehner, Kamel, and Tavares 2009c, 13–18.
 22. If the courtyard to the north (134a) is included, the total size increases to 213 m². See also Lehner, Kamel, and Tavares 2009c, 17.
 23. Lehner, Kamel, and Tavares 2009c, 17–18.
 24. Only the lowest brick courses of the walls belonging to Building K are preserved; see Lehner, Kamel, and Tavares 2009c, 17, fig. 8.
 25. Lehner, Kamel, and Tavares 2009a, 10–13.
 26. Lehner, Kamel, and Tavares 2009a, 11. It is so far not clear whether the baking activity was the original function of the room or constitutes a later (re)use of it. It also needs to be considered whether it was roofed or left open, for which no information has been found in the excavation report.
 27. Lehner, Kamel, and Tavares 2009a, 13, fig. 5.
 28. Lehner, Kamel, and Tavares 2009a, 12.
 29. See Section 5.2.2.1.5 for details.
 30. Lehner, Kamel, and Tavares 2009a, 16–18.
 31. Lehner, Kamel, and Tavares 2009a, 16.
 32. See Section 5.2.2.1.3.
 33. Lehner, Kamel, and Tavares 2009b, 87–91.
 34. Lehner, Kamel, and Tavares 2009b, 90, fig. 37.
 35. Note that none of the doorways in this corridor were placed on the same axis, so it was impossible for a person entering from the street to see directly to the end of it.

36. Lehner, Kamel, and Tavares 2006, 73–75.
 37. Lehner, Kamel, and Tavares 2006, 73.
 38. Lehner, Kamel, and Tavares 2006, 75.
 39. See Section 5.4.1.2 for further details.
 40. Kaiser et al. 1999, 71–81.
 41. Kaiser et al. 1999, 75.
 42. This has been proposed by the excavator; see Ziermann 2002, 41, fig. 40 a–c. There are some differences in the plan of Building A published in Kaiser et al. 1999, figs. 2 and 3, in comparison with Ziermann 2002, 41, fig. 40 b.
 43. Kaiser et al. 1999, 76. The precise function of this niche is not known.
 44. Kaiser et al. 1999, 75.
 45. This comparison has led Ziermann to believe that he was excavating an administrative quarter; cf. Kaiser et al. 1999, 71–81.
 46. There has been no data concerning any faunal analysis (or textual material published), which probably was not preserved, nor are there many details about the use of the various rooms that could be inferred from floor assemblages. This makes any conclusions with regard to the social status of the inhabitants of Building A impossible.
 47. See also Sections 5.5.1 and 7.5 for a detailed analysis of the development of this town.
 48. Soukiassian, Wuttmann, and Pantalacci 2002, 9–10; Jeuthe 2012, 29.
 49. Jeuthe 2012, 30–31.
 50. The precise function of this northern apartment has not yet been commented on by the excavators.
 51. Soukiassian 1997, 16.
 52. *Ibid.*
 53. *Ibid.*
 54. Pantalacci 1998, 304.
 55. Soukiassian, Wuttmann, and Pantalacci 2002, 97.
 56. Soukiassian, Wuttmann, and Pantalacci 2002, 150–175.
 57. Soukiassian, Wuttmann, and Pantalacci 2002, 153, figs. 131–132.
 58. Mills 2007, 6.
 59. Mills and Kaper 2003, 127. The plaster was in places 5 cm thick, which suggests several phases of replastering.
 60. Mills and Kaper 2003, 127.
 61. See Soukiassian, Wuttmann, and Pantalacci 2002, 15–16, figs. 3–4.
 62. Mills and Kaper 2003, 128–129.
 63. See Section 4.4.
 64. See discussion in Section 5.6. See also Wirth 2000, 325–327.
 65. Wirth describes an example of women in Tunis using streets and open spaces on the exterior of houses to deposit household waste of all kinds; see Wirth 2000, 327, with further references.
 66. For further details, see Section 5.2.2.1.
 67. See, for example, Ziermann 2002, 41, fig. 40 a–c.
 68. Pantalacci 1998, 304. In one of the rooms south of the peristyle court of the Western Apartments, 17 inscribed clay tablets with administrative notes have been found, and another 9 in an adjacent room.
 69. In contrast, for example, to the Roman-type house, see Wirth 2000, 328–331.
- ## 7 THE DEVELOPMENT OF TOWNS DURING THE END OF THE OLD KINGDOM AND THE FIRST INTERMEDIATE PERIOD (CA. 2200–2050 BCE)
1. For example, see the description of the First Intermediate Period as summarized in several earlier histories of ancient Egypt such as Breasted 1906, 147–152; Gardiner 1961, 107–116; and Grimal 1992, 137–141. For discussion on a short-term climate change affecting Egypt at the end of the 3rd millennium BCE, see Bell 1971 and more recently Moeller 2005a.
 2. Seidlmayer 2000, 143–145.
 3. Seidlmayer 2000 and Coulon 1997.
 4. Shaw 2000, 119.
 5. A period of about 100 to 150 years has been suggested as most plausible but still needs to be anchored more firmly within the absolute chronology of ancient Egypt; see, for example, Seidlmayer 2006.
 6. Alexanian and Seidlmayer 2002, 23–25, Abb. 15; see also Section 3.3.2 for further details.
 7. Alexanian and Seidlmayer 2002, 26. This is probably also linked to the revival of the cult for Snofru during the Middle Kingdom, which has also been witnessed at the Valley temple of the Bent Pyramid complex; see also Section 5.2.3.1.
 8. Lehner et al. 2011, 178.
 9. Valloggia 2011, 73.
 10. The decorated stone blocks from the causeway of Sahure, recently discovered, depict the processions bringing produce from hundreds of domains; see Vymazalova 2010 for further details.
 11. Posener-Kriéger 1976, 573. The archives of Neferirkare-Kakai suggest that the regular phyles of the temple comprise about 220 persons, to which it is necessary to add additional personnel such as scribes, lector priests, and artisans, which would augment the estimated number to about 250 to 300 individuals being supported by the funerary temple.
 12. Vymazalova 2010, 199–200, with further references.
 13. Brunner 1936, 14–20.
 14. Moeller 2005b.
 15. Shedid 1994.
 16. De Meyer 2011.
 17. Pérez-Die 2001.
 18. Roeder 1959. The German expedition excavating at the site was able to identify New Kingdom and Late Period settlement remains. Also found were stone blocks of a Middle Kingdom temple.
 19. Spencer 1993, 51–71.
 20. This is a common phenomenon at tell sites in Egypt; see, for example, the Ptolemaic temples at Kôm Ombo and

Edfu, which are surrounded by much higher tells that formed during the continuous settlement in these areas. At Edfu, there are parts of the site where the First Intermediate Period layers are situated 4–5 m higher than the Ptolemaic temple threshold.

21. Spencer 1993, 53.
22. Spencer 1993, 70.
23. Gomaà 1980, 107–109.
24. Spencer 1993, 69–70.
25. See De Meyer 2007 and De Meyer 2005.
26. De Meyer 2011, 48–49.
27. Willems 2007, 1–2 and 104–105.
28. Gomaà 1980, 114–116.
29. These are simple square shafts cut into the bedrock. During the author's participation in archaeological fieldwork at the site from 1999–2001, she was able to make many observations in this area. Old Kingdom beer jars could often be seen lying next to the emptied and probably looted shafts, suggesting an Old Kingdom date for most of them.
30. Moeller 2004, 17–18, fig. 4.
31. Moeller 2004, 19–24.
32. Moeller 2004, 22–23, fig. 5.
33. This conclusion is mainly based on the observations made by the author in the field in 1999–2001. Pottery sherds dating to the first half the Old Kingdom have only been found in the vicinity of the small step pyramid.
34. See also the discussion by Bommas 2012 on the presence of First Intermediate Period tombs.
35. Gomaà 1986, 309, 315; Helck 1974, 110.
36. Shedid 1994, 12.
37. Seidlmayer 2001, 93–103.
38. For further details about these provincial pyramids and their function, see the most recent study by Marouard and Papazian 2012.
39. Butzer 1976, 102–103.
40. The estimated flood height for the First Intermediate Period did not seem to have risen above 92–93 m a.s.l. See Kaiser 1995, 140 and Seidlmayer 2001, 81–92; see also the discussion in Moeller 2005a, 155–157.
41. Kaiser 1995, 139–140.
42. Kaiser 1995, 141–146.
43. The estimated maximum height for late Old Kingdom–First Intermediate Period water levels have been estimated at 93 m and 92 m a.s.l.; see Kaiser 1995, 139, Abb. 15.
44. Kaiser 1995, Abb. 16–18.
45. Kaiser 1995, 109–114, 119.
46. Kaiser et al. 1976, 98–107.
47. There have been some doubts expressed in recent publications as to whether H2 should be called a “palace complex”; see Raue 2014.
48. von Pilgrim 2006, 403.
49. von Pilgrim 2006, 404–405.
50. von Pilgrim 2006, 404, Abb. 1.
51. von Pilgrim 2006, 406, Taf. 1b. Heqaib had served under Pepi II, which can be learned from his biographical text at his rock-cut tomb at the Qubbet el-Hawa necropolis.
52. von Pilgrim 2006, 404–405.
53. Cult objects had to remain within the “holy” precinct where they had once been on display. This is usually the temple where they had been used. Such objects were never really discarded elsewhere, but instead were buried in caches beneath the temple floors. At H2, this deposit of cult objects in a closed-off room is a different kind of solution for the removal of such items, but the mix of different types of objects and materials – which included clay sealings and quartz chips – indicates that there was also other kinds of waste deposited here for convenience.
54. These are small seated statues that were unfinished and still had the red marks left by sculptors as guidelines. Together with these statues, a considerable amount of quartz chips was found. This has led the excavators to believe that a stone workshop must have been in the vicinity; see Kaiser 1999, 89.
55. Dorn 2005, 139, fig. 4.
56. By the later First Intermediate Period, the objects naming Unas would have been at least 200 years old!
57. von Pilgrim 2006, 410–411.
58. The fact that several different names of governors – such as Heqaib, Sobekhotep, and Sabni – have been found on the deposited objects suggests that there might have been more than one *ka*-chapel in this building; see von Pilgrim 2006, 408–410.
59. In this respect, it is also worth mentioning that the Heqaib sanctuary near the temple of Satet is a foundation that dates back to the 11th Dynasty ruler Antef III, who proudly announced the construction of this sanctuary in a building inscription emphasizing that it was founded on an earlier, derelict sanctuary for Heqaib. The German mission investigated any possible traces of an older building underneath the current sanctuary but did not find any. Therefore, it has been suggested the reference to older ruins of such a sanctuary is mainly propaganda in order to justify the erection of the new one; see von Pilgrim 2006, 412. With regard to the new discoveries, it cannot be excluded that this reference to an older sanctuary refers to a sanctuary installation within H2.
60. Dorn 2005, 140–141, figs. 6–9.
61. The published samples of the second sealing deposit show motifs typical for the early Middle Kingdom; see von Pilgrim 2001, 164–166, pl. 18 A–C, and Dorn 2005, 139, fig. 4.
62. Kaiser et al. 1976, 92–94, Taf. 30 a–b, Taf. 31–32.
63. Dreyer et al. 2002, 164.
64. See Sections 5.4.1.2 and 6.3 for further details.
65. This was first discussed in the author's PhD dissertation from 2004, which was based on the results of several surveys conducted between 2001 and 2002; see Moeller 2004. Since then, it has been possible to acquire much additional data, especially during the 2011–2014 seasons.
66. The 2012 season at the site has uncovered a series of enclosure walls turning toward the east that might have been the northern limit of the town during the 5th Dynasty. This fieldwork is still in progress.
67. Valerie Le Provost (IFAO) is currently analyzing the pottery assemblage from this excavation area.
68. Michalowski 1950, 101.

69. There is little data from Hierakonpolis – which lies on the opposite side of the river to Elkab – about the later Old Kingdom and First Intermediate Period.
70. This had already been suggested by B. Kemp during his brief survey at Tell Edfu in 1976; see Kemp 1977, 190. Up to now, no concrete evidence for a temple has been found, but its location might have been close to or underneath the later Ptolemaic temple. The 2012 season also revealed the presence of a large building complex in the Old Kingdom area with a wall of 2 m width that was not a town wall. Future field seasons have the objective of continuing excavations here.
71. Alliot 1935, 8–38; Bruyère et al. 1937, 2–17; and Michalowski 1950, 1–60. For example, Qar, a nomarch of the 6th Dynasty, had been educated at the capital before being sent to Edfu; see Moreno García 1998 for further details.
72. Vandier 1950.
73. Kemp 1985a.
74. The author conducted a brief visit at the site in January 2000 and could no longer find the remains of the enclosure wall that had been noted by Kemp in 1979; see Kemp 1985a, fig. 1 and pl. II, a and b.
75. Kemp 1985a, 50, figs. 10–11.
76. Hendrickx, Huyge, and Newton 2010.
77. Hendrickx, Huyge, and Newton 2010, tab. 1.
78. Hendrickx, Eyckerman, and Van Winkel 2009.
79. See Section 8.3 for further details.
80. Millet 2007, 690–691.
81. Leclère 2002, 32–33.
82. Gabolde 2000.
83. For further details about this octagonal column, see Le Saout, Ma'arouf, and Zimmer 1987, 294–295, 314, pl. I, and Gabolde 2000, 8, fig. 5.
84. Kemp 2006, 225–228, fig. 83. See Section 8.3 for further details and discussion.
85. The majority of the currently visible temple buildings date to the Ptolemaic and Roman periods. The oldest building remains that have been discovered so far belong to a *ka*-chapel of Mentuhotep II Nebhepetre; see Arnold et al. 2003, 69. The cult for Hathor, mistress of Dendera, has been attested as early as the Old Kingdom; see Zibelius-Chen 1978, 25.
86. Images from the *Description de l'Égypte* show remains of the tell and mud-brick buildings around and on the roof of the stone temple. The ancient mound, which had already suffered by seabkh digging at that time, is recognizable on a photograph of the front of the temple dating to about 1875 (taken by P. Sebah and currently held in the Archive of the Griffith Institute, Oxford). A similar image was published in Mahaffy 1899, 216, fig. 69.
87. Kemp 1985b. The majority of the collected pottery samples date to the 6th Dynasty and First Intermediate Period, with some sherds of even earlier date, possibly the 5th Dynasty; see fig. 5, nos. 2–9 and 3–5.
88. Marchand and Laisney 2000, 262–263. The residual sherds might also come from mud bricks, which were made out of a soil mixed with occasional pottery fragments.
89. Marchand and Laisney 2000; Marchand 2004. Excavations of the urban sector were directed by F. Leclère.
90. I would like to thank G. Marouard for sharing his observations on this point with me.
91. For more information about the tombs, see Petrie et al. 1900; Fischer 1968; and Slater 1974. Excavations at this cemetery were conducted by W. M. F. Petrie in 1898 and then by Clarence S. Fisher between 1915 and 1918, whose results were never published. Also noteworthy is the lack of suitable cliff areas toward the desert that could have been used for rock-cut tombs.
92. Marchand 2012, 175–177.
93. Mathieu 2000, 503–505; Mathieu 2001, 536; Mathieu 2002, 511–512. See also Marchand 2012, 276–278, fig. 3.
94. Marchand 2012, 277.
95. The presence of another temple building to the east of the settlement – see Marchand 2004, pl. I “Temples de l'Est” – might have limited the settlement from growing farther in this direction.
96. Fischer 1968.
97. Adams 2005; Adams 1992 and Adams 1998.
98. Helck 1974, 90–95. There is no archaeological evidence for the town of Thinis, but the cemetery of Naga ed-Deir was likely connected to this settlement, and it is mentioned in tomb inscriptions; see Bard and Shubert 1999, 665–669.
99. B. Kemp points out the enormous potential for exploring the early remains at this site, which he recorded during a brief survey in the 1970s; see Kemp 1977, 186–189.
100. O'Connor 2009.
101. Kemp 1977, 189; Patch 1991, 358–362.
102. Adams 2005, 93–103.
103. Adams 2005, 118–119, 574. Levels Ia–d.
104. Adams 2005, 574–575.
105. Adams 2005, 118–119.
106. Adams 2005, 129.
107. Adams 2005, 509.
108. Adams states that the household size referred to in the Heqanakht letters was substantially larger than the normal average; Adams 2007, 16. However, when comparing this information with that of the Lahun papyri, similarly large households are present; see Kemp 2006, 219–220, fig. 79.
109. Adams 2005, 547–566, 580; see also figs. 4.18–4.20 for the spatial distribution of the sealings in the buildings.
110. Adams 2005, 422–445, figs. 3.27–3.30 and tab. 3.1.
111. At Tell Edfu there is good evidence for the presence and action of local officials, who sealed many different types of sealings with the same seal; therefore, there is much repetition in the motifs. See Moeller 2012.
112. Adams 2005, 580.
113. Adams 2005, 516.
114. Adams points out that from the cemetery and temples at Abydos there are very few objects made of quartzite, and limestone had been the preferred material for the numerous funerary stelae; see Adams 2005, 518–519. Another point worth considering in this context is the lifetime of a utility object such as a grinding stone. Could the use encompass several generations?

115. Adams 2005, 512. While there is little evidence for royal expeditions to acquire raw materials during the First Intermediate Period, there is evidence from the early Middle Kingdom onward that rulers took up such expeditions again. For example, there were those to the Sinai for copper and malachite, such as the one recorded by Mentuhotep IV, who left an inscription at Ayn Soukhna; see Abd El-Raziq et al. 2002.
116. Adams 1998, 29.
117. See also Kemp 1989, 246.
118. Jeuthe, Le Provost, and Soukiassian 2013, 209–216.
119. Soukiassian et al. 1990; Jeuthe 2012, 29.
120. Jeuthe 2012, 31.
121. For details on the exact chronological sequence of *ka*-chapels built during Phase I (end of the 6th Dynasty, preconflagration), see Jeuthe, Le Provost, and Soukiassian 2013, 204, no. 10.
122. Soukiassian, Wuttmann, and Pantalacci 2002, 43–44, 60–61. There is evidence for some restoration at chapels no. 2 and no. 3 after the fire; similarly, the chapel of Medu-Nefer farther south was also minimally restored. See also Jeuthe, Le Provost, and Soukiassian 2013, 206–207.
123. Soukiassian, Wuttmann, and Pantalacci 2002, 17, fig. 5.
124. Jeuthe 2012, 31–32.
125. Jeuthe, Le Provost, and Soukiassian 2013, 209–216. These two phases and their place within the historical chronology are mainly based on the analysis of the ceramic material by V. Le Provost.
126. Jeuthe 2012, 31, 35, Abb. 3.
127. Jeuthe 2012, 32; Jeuthe, Le Provost, and Soukiassian 2013, 206–207.
128. Jeuthe 2012, 108–110.
129. Jeuthe 2012, 364–365.
130. Jeuthe 2012, 35, Abb. 3.
131. Jeuthe 2012, 277–289.
132. Pantalacci 1997.
133. “Middle Egypt” is the term used to designate the stretch of the Nile Valley between Assiut in the south and Memphis in the north.
134. Kaiser 1995, 138–140.
135. Only a regional survey along the parameters established by R. McC. Adams, which he conducted for Mesopotamian settlement patterns, could shed some light on such a process; see Adams 1981.
136. O’Connor 1972, 86, table 4.1. The rise in numbers of burials doubles from the Old Kingdom to the First Intermediate, while it decreases again for the 11th Dynasty. This is interesting data but contains many uncertainties with regard to the precise dates assigned to the individual burials, which was done by G. Brunton in the 1920s and 1930s, when the dating of pottery was less established than it is nowadays. O’Connor describes these concerns clearly in his analysis.
137. The latter hypothesis is less likely and has not been confirmed by the anthropological evidence. The study of the First Intermediate Period skeletons from different sites in Egypt indicates that the health conditions during that time did not differ from those of the Old and Middle Kingdom.
138. Duhig 2009. This article is a summary of results from her unpublished PhD dissertation.
139. Duhig 2009, 64. Her results can be considered reliable because she explains how she achieved a good chronological control of the material and dismissed any evidence that was not clearly datable.
140. Duhig 2009, 60–61. Duhig included a substantial number of burials from this region, and more precisely from the site of Qau el-Kebir, where she noticed an increase in trauma on the skeletons. This fits well with the evidence of regional conflict in this area from textual sources.
141. There are no comparable amounts of burial data available in Upper Egypt except for some of the skeletal material excavated at Elephantine; see Rösing 1990.
142. See Bernhardt, Horton, and Stanley 2012 for the latest data from the Nile Delta.
143. See, for example, Hassan 1997, with further references. For a critical review of this topic, see also Moeller 2005a.

8 THE MIDDLE KINGDOM: TOWN PLANNING AND INTERNAL COLONIZATION AT ITS HEIGHT

1. Bourriau 1991b.
2. See the discussion and evidence presented by D. Arnold on the move of Amenemhat I from Thebes to Lisht; Arnold 1991.
3. Arnold 1996, 13; Arnold, Arnold, and Dorman 1988, 14–16.
4. Tavares and Kamel 2012.
5. Bourriau 1991a; Giddy 2013.
6. Obsomer 1995, 601.
7. Tallet 2005, 101.
8. Tallet 2005, 104–105, fig. 27.
9. For example, Old Kingdom activity is mainly attested at the basalt quarries of Widan el-Farras to the north of the lake.
10. Senwosret III had put up an official stela marking the new boundary of the Egyptian-controlled area in Nubia at Semna; see Obsomer 1995, 352–358.
11. Czerny 1999, 15.
12. The original layout in its unaltered state has been considered the first settlement phase, e/3. Shortly after the start of people moving into the houses, changes occurred that have been assigned to the second phase of occupation at the site, termed e/2. The latter is the best-preserved one.
13. Czerny 1999, 18.
14. Czerny 1999, 19.
15. Czerny 1999, 21, Abb. 3. The courtyard has a size of only 8 m² and could easily have been roofed. However, multitudes of traces of various household activities – including temporary fireplaces, grinding utilities, and water jars in the floor – led Czerny to favor the interpretation of an

- open area, but he admits that this does not need to have been the case for each house.
16. Czerny 1999, 19, 29.
 17. Rothschild et al. 1993, 124–126. The ethnographic study on the abandonment of Zuni farming villages in western New Mexico provides some evidence about abandonment processes and the signs for intermittent use or a possible future return of the inhabitants in the form of maintenance work on structures and the boarding up of windows and doors.
 18. Czerny 1999, 19, 26–28.
 19. Czerny 1999, 121.
 20. The material from Tell el-Dab'a compares relatively well with the pottery assemblages from the settlement at Dendera; Marchand 2004.
 21. Czerny 1999, 132.
 22. Naroll 1962. This is based on the estimation of 10 m² of living space per person.
 23. See Section 5.2.4.
 24. Czerny 1999, 22.
 25. See the discussion by Kemp 2006, 215–220. He notes that smaller grain silos occur infrequently at the settlement. From the archaeological record it is clear that Lahun also saw several phases of occupation even if those have not been recorded in depth. It is very likely that the granaries in the smaller houses were later additions, showing exactly the same phenomenon that has already been observed at the oldest planned settlement of the Khentkawes complex; see Section 6.2.1.
 26. Kemp 1987, 39–41.
 27. Czerny 1999, 130.
 28. Czerny 1999, 307–313; see also tab. 1.
 29. At the workmen's village at Amarna, much evidence has been found for the keeping of domesticated animals in pens on the outside of the actual settlement. See details in Kemp 1987, 37–41.
 30. Redding 1992, 103–104.
 31. Czerny 1999, 130–131.
 32. Czerny 1999, 134–135.
 33. Forstner-Müller 2010, 107.
 34. Czerny 2010; Forstner-Müller 2010, 107.
 35. Forstner-Müller et al. 2004, 108. She points out that only additional fieldwork in this area will clarify the stratigraphic relations between the settlement underneath the temple in area R/I and those remains farther to the south that have been detected by the geophysical survey.
 36. Forstner-Müller et al. 2004, 106. She describes them as following the “hippodamic” settlement layout, referring to the town plan established by Greek philosopher Hippodamus of the 5th century BCE who conceptualized the urban layout at Miletus. However, it is not suitable to refer to this type of settlement layout because it is entirely Greek in nature and cannot be extrapolated to every town plan that has orthogonal streets and identical housing blocks. The Hippodamian concept dates to much later times and belongs to a different cultural sphere, which also takes into account distinct proportions and the organization of specific neighborhoods. This term should not be used in conjunction with Egyptian town planning. The earliest example of a Hippodamian layout being introduced in Egypt has been found at Alexandria, and so far the only other example in Egypt was recognized at Philadelphia in the Fayum region, dating to the early Ptolemaic period; see Müller 2006, 116–119.
 37. Forstner-Müller 2010, 107. These walls have a thickness of about 6 m and show up clearly on the geophysical map; see *ibid.*, 105, fig. 2a.
 38. Czerny 2010, 74.
 39. See Figure 9.4. The entrances have not been marked on the published plans, probably because they had not been preserved, which makes it difficult to assess the access patterns of these houses.
 40. Czerny 2010, 75.
 41. Czerny 2010, fig. 6. The fragmentary nature of the preserved evidence is also not helpful in this respect.
 42. Czerny 2010, 69, no. 5.
 43. Czerny 2010, 77, fig. 8.
 44. See “Further discussions,” Section 8.I.
 45. Czerny 2010, 74, no. 13.
 46. Czerny 2010, 79.
 47. Forstner-Müller 2010, 107.
 48. See http://www.auaris.at/html/ezbet_en.html. This would suggest a lifetime of about fifty to sixty-five years in total for the four phases of the planned settlement.
 49. Forstner-Müller et al. 2004, 106.
 50. Czerny 1998, 46; see also Bagh 1998, 49.
 51. Arnold and Arnold 1979, 24.
 52. Arnold and Arnold 1979, 21.
 53. Harrell and Bown 1995; Bloxam and Storemyr 2002; and Shaw 1994.
 54. Harrell and Bown 1995, 76, no. 18.
 55. Śliwa 1988, Śliwa 2014.
 56. Śliwa 1986, 169.
 57. From the published plan of the site, see, for example, Śliwa 1992. It is obvious that the entire eastern block is based on reconstruction in order to create a symmetric layout. While it is likely a reconstruction, it is necessary to keep in mind that this remains a hypothetical layout.
 58. Śliwa 1992, 178. Each room measures 7.9 m by 2.10 m, and the open court has a length of 12.9 m and a width of 5.25 m.
 59. For the function of sinusoidal walls, see “Further discussions,” Section 8.I.
 60. Śliwa 1986, 178, Abb. 8; Śliwa 1992, Abb. 4–7. Various items such as copper needles, grinding stones, pieces of a stela, and some faience armbands (attested for men and women in Egypt – they are not gender specific) are the kinds of objects that have been discovered within the building units.
 61. Śliwa 1992, 178.
 62. Śliwa 1992, 178.
 63. At least any evidence for multiple phases of floor renewal is not reported by the excavator.
 64. Śliwa 1992, 180.
 65. Śliwa 1992, 181, fig. 2.

66. van den Driesch 1986, 3, tab. 2. The prevalence of fish bones is not surprising given the proximity to the lake.
67. Śliwa 1986, 169; Ginter et al. 1980, 134–136, 166–169.
68. Arnold and Arnold 1979, 26, 32–39; Śliwa 1988, 200–202.
69. Arnold and Arnold 1979, Tafel 21.
70. Arnold and Arnold 1979, 26, 35, Abb. 20; Śliwa 1986.
71. Bietak 2012, 142–143, 152–153, fig. 89, fig. 99.
72. Śliwa 1992, 186. He estimates that about 3.76 m² was available per person for sleeping. See also Śliwa 2005, 479–480. Śliwa suggests that toward the end of the functioning of this settlement, there was certainly a reduced number of inhabitants, which can be witnessed by some of the rooms being bricked up or filled with waste.
73. Śliwa 2005. The exact nature of these *kheneret* institutions is completely unknown because there has never been one identified in the archaeological record. As to their nature and purpose, any information is based exclusively on textual sources. There is considerable debate about the function of this kind of institution; see Quirke 1988.
74. See Naroll 1962 and Brown 1987.
75. It should also be kept in mind that it cannot be excluded that some of the elongated rooms were used for storage and activities other than sleeping. The architectural form does not exclude multiple kinds of uses for such buildings, a phenomenon that is especially typical for preplanned settlements.
76. See Section 5.2.2.1.1.
77. Śliwa 1988, fig. 3. Five test trenches have been indicated on the site plan.
78. Śliwa 1988.
79. A few sandy mud bricks were uncovered in an area north of trench QS VIII/80 – see Śliwa 1988, 207 – but this is the only mention of bricks in the reports in relation to the Eastern Settlement. See also Pawlikowski et al. 1983, 87–99.
80. Śliwa 1988, 207, and see Abb. 3.
81. For the analysis of stone tools in the Eastern Settlement, see Pawlikowski et al. 1983, 99–113.
82. Śliwa 1988, 213.
83. Śliwa 1988, 212–213, figs. 35 and 36.
84. Śliwa 1988, 213.
85. Śliwa 1988.
86. Śliwa 1988, 210–211, figs. 32–35.
87. Śliwa 1986, 169; Śliwa 1988, 192.
88. Śliwa 1988, figs. 1 and 3; Harrell and Bown 1995, 86.
89. Śliwa 1992, 187; Śliwa 2005 479. Śliwa emphasizes this connection especially in the latter publication, where he links the quarry road that leads to the quarries at Widan el-Farras to the two settlements.
90. Śliwa 2005.
91. Shaw 1994.
92. Harrell and Bown 1995, 85–86.
93. Harrell and Bown 1995, 89.
94. These points have been tentatively proposed by J. Harrell and his colleague without any references to a concrete geological study; see Harrell and Bown 1995, 89. The lower water level during the Middle Kingdom is deduced from the land reclamation efforts during the 12th Dynasty. The higher water levels of the Old Kingdom would have allowed for heavily loaded boats to cross through the Hawara Channel during the flood season.
95. Śliwa 1986, 167–169.
96. The environmental conditions of hyperarid desert characterizing this area today are misleading, as the lake has shrunk considerably since the Pharaonic period.
97. I will use the name Lahun to designate the settlement and Illahun for the pyramid complex of Senwosret II. While it has been established that Petrie probably misunderstood the name of the townsite, Lahun has prevailed in many publications on this topic. See, for example, Quirke 2005, 1, and Kemp 2006; see also Luft 1998, 1–2. The alternative name that is frequently encountered in the literature is Kahun.
98. Petrie and Sayce 1891.
99. Borchardt 1899. He explains that there were three major waste deposits along the exterior of the town walls at Lahun: one near the main gate to the east, another one along the northwestern corner, and one to the north of the Valley temple remains. It is in the latter location that he was able to find more papyri, so he assigned those that were bought on the antiquities market to this find spot.
100. Now in the Museum of Berlin and being published by Ulrich Luft, who has already worked extensively on this material. See, for example: Luft 1992b; Luft 1992a; Luft 2006.
101. Some of those have recently been published by Felix Arnold; see Arnold 2005. These are important additions to our understanding of construction techniques employed at Lahun.
102. Petrie, Brunton, and Murray 1923, 39–41.
103. The results of this archaeological work were only published in the form of a preliminary report by his staff members due to Millet's untimely death in 2004; see Frey and Knudstad 2008.
104. See Horváth 2009a.
105. Horváth 2011–2012, 46, fig. 2.
106. The discovery has so far been announced only in the form of a press release in the Egyptian press.
107. For a brief summary of the monuments around the pyramid complex, see Quirke 2005, 3–30; for further details, see Petrie, Brunton, and Murray 1923.
108. Quirke 2005, 11–12.
109. Petrie, Griffith, and Newberry 1890, 21–22; Petrie, Brunton, and Murray 1923, 39–40, pl. XXXIII.
110. Stadelmann 1997, 237.
111. I would like to thank Gregory Marouard, who first detected some new features on these satellite photos that have now changed the plan of Lahun considerably.
112. See details of size and construction in “Further discussions,” Section 8.III.1. There is no evidence for any specific aspect that would classify this town as fortified, such as watchtowers or stairs providing access to the top. Its walls are also relatively thin, for example, in comparison with the thick walls of the contemporary Nubian fortresses.
113. There were a few traces that might belong to some activities outside the town that were noted during the

- investigation of the street and its two staircases approaching the eastern gate; see Frey and Knudstad 2008, 69, and further details in “Further discussions” [Section 8.III.3](#).
114. Arnold 2005, 82, figs. 4a–b.
 115. Petrie and Sayce 1891, 5, and Quirke 2005, 43–44.
 116. See Arnold 2005, 80–83, for further technical details on this north–south enclosure, and see also “Further discussions,” [Section 8.III.1](#).
 117. See, for example, Kemp 2006, 211–213, fig. 76. Most recently, see Snape 2014, 64–65.
 118. See, for example, Petrie and Sayce 1891, 5, who interpreted the western settlement area with densely packed houses as the workmen’s quarter.
 119. See [Section 5.4.1.2](#).
 120. Frey and Knudstad 2008, 33–35, fig. 8. See also “Further discussions,” [Section 8.III.1](#), for more details.
 121. There is no information about the stratigraphic relation of walls abutting the enclosure or what happened when the new wall segment was built against its outer face. Presumably there was a foundation trench that would have cut through quite a few of these older house walls. No archaeological records for such an undertaking currently exist but would be worth an additional investigation at the site.
 122. It cannot be excluded, of course, that such openings did exist in the later phases of the settlement but were simply omitted on Petrie’s plan.
 123. See Quirke 2005 and Horváth 2009b with further references. This has most recently been disputed by Luft 2011, who bases his interpretation almost exclusively on textual evidence, without taking into account the archaeological data and stratigraphy relating to the town walls.
 124. Horváth 2009b.
 125. The name Hetep-Senwosret is frequently written within the square enclosure of the *ḥwt* sign on seals, associated with the names of estates, while the papyri usually show the town (*nḥwt*) determinative, sometimes following the *ḥwt* sign; see Quirke 2005, 44–45.
 126. This, of course, is impossible to prove, because it would necessitate a thorough stratigraphic analysis of the whole site, with precise records of the different occupational phases, which has never been done. I would just like to recall a similar situation at the Khentkawes town at Giza, which, during the new fieldwork by Mark Lehner, now has an early phase that was not yet linked to the mortuary complex of the queen.
 127. Frey and Knudstad 2008, 64–66, fig. 45.
 128. Petrie and Sayce 1891, 6.
 129. Frey and Knudstad 2008, 48–58. See also “Further discussions,” [Section 8.III.4](#).
 130. Frey and Knudstad 2008, 53, fig. 34.
 131. Frey and Knudstad 2008, 48–49. The Canadian mission observed extensive quarrying and cutting of the limestone bedrock into a level surface; see also figs. 28–29.
 132. See [Figure 8.40](#).
 133. See [note 128](#).
 134. Frey and Knudstad 2008, 58–63, figs. 38, 40. The authors suggest that the entrance to the acropolis might have been from this southern open courtyard. However, the whole area is so heavily denuded that it is impossible to reconstruct much of the mud-brick buildings inside it.
 135. For further details, see “Further discussions,” [Section 8.III.5](#).
 136. Kemp 2006, 218; Kemp 1972, 662; Quirke 2005, 47; Frey and Knudstad 2008, 59.
 137. The reconstruction of the plan by Frey and Knudstad is based on very few mud-brick wall remains and must remain a tentative outline. This also includes the reconstructed entrances. See Frey and Knudstad 2008; compare figs. 38 and 40.
 138. This, for example, is the case at the mortuary temple of Senwosret III at Wah-Sut (see Wegner 2007) and at the “command building” at Buhen (see Emery 1979, pl. 3).
 139. Kemp 2006, 232, fig. 85.
 140. Dunham 1960, 9, 13.
 141. Smith 1990, 205.
 142. Kaiser et al. 1988, 152–157, Abb. 6 and 7. This temple might be the closest parallel to the remains at Lahun, but it has not yet been fully published.
 143. For the Old Kingdom, there is an example of a separate enclosure wall around a large official storage installation at the settlement of Heit el-Ghurab at Giza; see [Figure 5.11](#) (Royal Administrative Building). However, this is quite a special layout with a close link to the gallery complex and might not have been the norm. For the Middle Kingdom, there is no example of any administrative building complex being surrounded by its own enclosure wall.
 144. Frey and Knudstad 2008, 60. The Canadian mission reports that the whole area here is characterized by “smooth quarried limestone bedrock which has now become very soft and crumbly, so much that it has lost much of its originally quarried surface.” This indicates that there is no hope of finding any more traces than those detected during their fieldwork in this area. Foundation trenches did not really exist for the mud-brick walls, which were directly founded onto the bedrock. Sometimes a very shallow trench of a few centimeters would have been cut into the ground, but this could easily disappear by the flaking of the stone and erosion. See also “Further discussions,” [Section 8.III.5](#), for additional details.
 145. See Quirke 1997, who discussed the temple of Anubis. Horváth 2009b provides additional suggestions in his analysis of temples at Lahun.
 146. See, for example, Collier and Quirke 2002, 62–63, UCL 32126, 92–93, and UCL 32198. It has been suggested that Sopdu, Lord of the East, had a specifically close connection to Senwosret II, which is the reason why he was being evoked in the papyri and not because he was considered the local town god; see Quirke 1997.
 147. Horváth 2009b, 191; Petrie and Sayce 1891, pl. IX, no. 26.
 148. Kemp 1972, 662; see also Kemp 2006, 218.
 149. Quirke 1997, 26; Arnold et al. 1990, 25.
 150. See also Horváth 2009b, 191, who came to the same conclusion.

151. Petrie, Brunton, and Murray 1923, pl. XXXVI A, “Lahun House,” and Pl. XLIV nos. 7–8. Petrie published only a small sketch of this building, and it does not appear on his general plan of Lahun. From the description he provides in the publication, it is likely that it was situated in the southern part of the site, east of the main north–south street: “The only matter of interest was a building on the eastern side of the street which runs south from the east of the acropolis.” See also Gallorini 1998, 52–53, fig. 4.
152. Petrie, Brunton, and Murray 1923, 39, 41: “Up this street, and further towards the centre of the town, a large number of clay sealings were found. Drawings of all of these are given here on pls. LXIV, LXV, see sec. 101.” Two pages further along in his report he specifies the find spot of the sealings: “The sealings pls. lxiv and lxv were nearly all from a house east of the westernmost row in the south half of the great town, apart from the workmen’s quarter on the west.”
153. Ben-Tor 2007.
154. Petrie, Brunton, and Murray 1923, 41.
155. Wegner 2001a.
156. Petrie and Sayce 1891, 14. He explains in this report that “nearly all of these sealings were picked up in two or three rooms of the town by the small boys of the village who used to hunt over the dust and earth, after the workmen had cleared a room, they sometimes thus found little things which were not noticed in the larger work of digging.” This statement reveals that many of the objects, including the sealings, were found by the children of the modern village, making it impossible for any valid reconstruction of the original find spot. Taking into account this description and also that Petrie would excavate a room and fill the one he had just excavated before with the excavation spoils, makes any objective evaluation of the context of these objects impossible.
157. See, for example, Smith 1990 and Smith 2001.
158. Wegner 2001a.
159. Moeller, Marouard, and Ayers 2012; Moeller 2012.
160. The archaeological context of discarded sealings on the mud floor that stem from the final phase of occupation has been attested at the Second Cataract fortress of Uronarti in Lower Nubia as well as the two columned halls of the administrative building complex at Tell Edfu.
161. See Section 7.4.2 and 7.5 for further details.
162. Picardo 2014.
163. Quirke 2005, 55–88.
164. For a detailed analysis of the internal building layouts, see Section 9.5.
165. For further details about the external staircases, see “Further discussions,” Section 8.III.2.
166. Frey and Knudstad 2008, 42–48.
167. Kemp 2006, 211–221. He estimated that the total capacity of the granaries of five mansions at Lahun could have supported a population of between 5,000 and 9,000 people.
168. Petrie, Griffith, and Newberry 1890, 49–50; see also Germer 1998. The analysis provided evidence for the presence of cereals and fruits from trees in addition to pulses, mainly deriving from cultivated plants and trees.
169. See Petrie, Griffith, and Newberry 1890, 28–29, pl. IX; Petrie and Sayce 1891, 11–12, 54–55, pl. VII.
170. Collier and Quirke 2002, 110–111. *Some land has been ploughed for the servant – there in the district of Hetep-Semwosret t-v . . . and ? the region: the district of Horus*, UC 32202.
171. Collier and Quirke 2002, 10–11. *This is a communication to the lord l.p.h. about allocating assignments to the vegetable-producers (irw-smyw) Sire, Iku, Ankhtifi?* UC 32098A.
172. Collier and Quirke 2002, 120–121.
173. Collier and Quirke 2002, 149.
174. See Section 8.2.2.
175. Quirke 2005, 85.
176. Petrie and Sayce 1891, 8.
177. Horváth 2011–2012, 48, fig. 6.
178. Horváth 2009b, 198; see also fig. 4.
179. Kemp 2006, 217.
180. Petrie and Sayce 1891, pl. XVI.
181. See details in Gallorini 1998.
182. See the reconstruction of find spots recorded by Petrie and his work pattern published by Gallorini 1998 and Collier and Quirke 2002, v–ix.
183. Quirke 2005, 80.
184. Quirke 2005, 77–80.
185. Horváth 2009b, 195.
186. Gallorini 2011.
187. See Kemp, Merrillees, and Edel 1980 and Fitton, Huges, and Quirke 1998 for detailed analyses of this material.
188. Kemp, Merrillees, and Edel 1980, 57–102.
189. Kemp, Merrillees, and Edel 1980, 84; see also Borchardt’s sketch in Borchardt 1899, 89. There are compelling arguments for this dump being situated north of the western sector at Lahun.
190. Fitton, Huges, and Quirke 1998, 130.
191. Trade within the eastern Mediterranean could have not only been conducted directly by the Egyptians themselves but also via middlemen, but additional data is needed in order to draw any firm conclusion on this matter.
192. Fitton, Huges, and Quirke 1998, 123.
193. Fitton, Huges, and Quirke 1998, 132–133.
194. The exact procedures and official measures that must have been in place for such restrictions are so far not well known. Currently the best source is the evolution of the Deir el-Medineh workmen’s village, which saw several additions and changes of population numbers that were highly regulated by the state; see the comprehensive study of Deir el-Medineh by Valbelle 1985.
195. Petrie and Sayce 1891, 50; Collier and Quirke 2002, 128–129, UC 32209 and 192–193, UC 32212.
196. The move of the capital from the Thebes to Itj-Tawy probably happened in the latter part of Amenemhat I’s reign; see Arnold 1991, 14–16.
197. Wegner 2001b, 287–288.
198. The attempt to identify the northern extent of the site, which currently lies under the cultivated fields, by

- conducting a magnetic survey has been unsuccessful; see Herbig 2003, 36–37.
199. Wegner 2001b, 287.
200. Wegner 2001a.
201. Wegner 2001b, 284, fig. 2.
202. Wegner 2006, 35.
203. Wegner 1998, 33, fig. 15.
204. Wegner 1998, 22.
205. One of the jars was painted with the sign showing the front leg of an ox, which is part of the typical meat cut used in offerings. See Wegner 1998, 18; also fig. 10.
206. Wegner 1998, 18.
207. See Section 9.6 for a detailed analysis of the internal layout and the core unit of Building A.
208. Wegner 1998, 10–13. For a more detailed analysis of the precise layout and comparative material, see Section 9.6.
209. Wegner 1998, 11, fig. 6.
210. Wegner 2001b, 289, fig. 5.
211. Wegner 1998, 25.
212. Wegner 2001b, 292. For a detailed outline of the various alterations made in this part of Building A, see Section 9.6.
213. Wegner 2001b, 292–296, fig. 7. See also the “Further discussions,” Section 8.IV.I.
214. Wegner 2006, 33.
215. Wegner 2001b, 290–291, fig. 6; Wegner 2004.
216. Wegner 1998, 20–21. The excavators also noted deposits of organic material around these installations, which are currently being analyzed.
217. Wegner 1998, 21.
218. Wegner 2006, 36.
219. Herbig and Wegner 2003; see especially fig. 3.
220. Wegner 2006, 36.
221. Wegner 2001b, 297.
222. Wegner 2001b, 301.
223. Wegner 2001b, 301 no. 330; see also Davies 1929.
224. Wegner 2006, 34–35.
225. Wegner 2007, 287–296; Smith 2010.
226. Wegner 2007, 291.
227. Smith 2010, 86–176.
228. This compares very well with the constantly evolving bakery installations and production facilities next to the Gallery Complex at Giza’s Heit el-Ghurab settlement; see Section 5.2.2.1.
229. Smith 2010, 144–179.
230. Wegner 1998, 37; Bourriau 2003.
231. Wegner 1998, 37–41.
232. Wegner 2001b, 307; Davies 1943, pl. XXXIV.
233. Wegner 2001b, 307–308; Wegner 2007, 8, fig. 3.
234. See, for example, Kemp 2006, 231–244, Smither 1945, and Smith 1995 for further details.
235. Smith 2001; Smith 1990.
236. It is not possible to include an in-depth discussion of the Nubian forts within the framework of the current study, because they fall outside the main topic.
237. Much of the area on the exterior of the fortress had been heavily eroded, which made any excavation difficult; see Emery 1979, 87–89.
238. Emery 1979, pl. I.
239. Kemp 2006, 241–242; Vercoutter 1955. Up to now, the function of these building complexes has not been very well understood; it is entirely possible that they served purposes other than those proposed by Kemp and Vercoutter.
240. Kemp 2006, 211.
241. Franke 1991.
242. For a brief summary of these discoveries, see Millet and Masson 2011.
243. Van Siclen 1984, 83.
244. Jacquet-Gordon 2007, 317–318; Christophe 1951, pls. VI–VIII. H. Jacquet-Gordon mentions the presence of a Tell el-Yahudiya juglet from these excavations that she saw in the magazine of Karnak North, and Christophe published a selection of scarabs (pl. XLIX) of which at least two or three predate the New Kingdom (nos. 1, 14, and 15).
245. Jacquet-Gordon 2007 and Jacquet 1994.
246. Jacquet-Gordon 2007, 320–321, figs. 3 and 6.
247. See also the recent publication by Jacquet-Gordon 2012.
248. Jacquet-Gordon 2007, 322, fig. 7; Jacquet 1994, pl. 3.
249. Lauffray 1980; Lauffray 1995, Debono 1982, Millet 2007, and Millet 2008.
250. Lauffray 1980, 44–52, fig. 16.
251. Lauffray 1980, 46. Lauffray mentions the discovery of a private name sealing naming the “Bureau of the Vizier of the Southern Town,” which fits this interpretation of an important elite quarter. Further late Middle Kingdom sealings as well as button seals dating to the First Intermediate Period and early Middle Kingdom have been recorded in lower levels.
252. Debono 1982, 378–388. These structures were not published on any plan.
253. See Millet 2007 and Millet 2008.
254. Millet 2007, 687–690.
255. Leclère 2002, 32–33.
256. See Redford 1984; Redford 1988; Redford et al. 1991 and Smith and Redford 1976.
257. S. Orel in Redford et al. 1991, 90–99.
258. Redford 1984, 98; Redford et al. 1991, 98.
259. See Azim 1980 and Fazzini and Peck 1982, 44.
260. This calculation must, of course, remain speculative because there is not enough data for all these areas connecting to a sprawling settlement.
261. Darnell 2004, 25, fig. 1.
262. von Pilgrim 1996, 17, Abb. 1, BII–BXVI.
263. “Häusergruppe –Süd” (H.G.S.) = BI.
264. von Pilgrim 1996, 15, tab. 1. Note that Bauschicht 13/XIII is now being dated from the late 12th Dynasty up to the mid-13th Dynasty; see the discussion in Ben-Tor 2007, 6–7. As von Pilgrim points out in the introduction of his publication, the detailed pottery analysis and the small finds still await publication and are currently being prepared by separate authors.

- Therefore, the assignment of the various building phases to the precise chronological phases remains preliminary; see von Pilgrim 1996, 13–15.
265. It is not possible within the scope of this work to conduct an in-depth investigation of the meaning of this term. Like so many terms for “settlement” and “fortress,” there seems to be a certain ambiguity for their precise identification within the archaeological record. For a brief summary regarding this terminology and certain ambiguities as to its correct understanding, see Vogel 2004, 21, and Somaglino 2010, 15–18. See also Morris 2005, 809–814, who points out that a *mmw* has never been identified archaeologically. Nevertheless, textual sources from the Old Kingdom up to the New Kingdom seem to have used the term *mmw* for designating fortresses along the Egyptian frontiers.
266. Wells 1994.
267. Vogel 2004, 63–64, also tab. 2 on p. 62; Gardiner 1947, 9–11; Gardiner 1916. This was also the case for the site of Gebel es-Silsila, which is also mentioned under both headings.
268. von Pilgrim 2010, 266–267; Kopp et al. 2010, 15–16. For the most recent report on the Middle Kingdom town wall, please see von Pilgrim 2013.
269. Contra von Pilgrim 2010, 267. Two possible explanations have been brought forward in order to explain the lack of an 18th Dynasty town wall, which seems to be a wider phenomenon in Upper Egypt; see Spence 2004, 269.
270. For example, those are very well attested for the Old Kingdom at Elephantine; see Ziermann 1993.
271. It is not entirely clear how long these older walls remained in use; see Hendrickx, Huyge, and Newton 2010, 162–164.
272. Grajetzki 2006, 59; Grallert 2001, 205, Am3/Wf001. The text on this stela dates to year 44 of Amenemhat III and mentions the existence of an enclosure wall that might have been built under Senwosret II.
273. Davies 2003c.
274. This could not be the only difference that justified its inclusion within the list of fortresses on the Ramesseum onomasticon, especially in view of Gebel es-Silsila, which was also mentioned and which certainly lies neither on an island nor within the southern border region.
275. von Pilgrim 2010, 267–259, Abb. 7, no. 25. He identifies the toponym of *senemet* (*snmt*), which follows after the entry of Elephantine on the Ramesseum onomastion list under the fortress heading. In the past, *snmt* has been identified with Biggeh, but no archaeological evidence for any major Middle Kingdom installation has ever been found on this island. Von Pilgrim suggests that this term designated a specific place on the east bank of the river.
276. von Pilgrim 1996, 223.
277. von Pilgrim 2010, 259, fig. 2.
278. Kaiser et al. 1988; von Pilgrim 2006, 413. For the archaeological details of this installations, see Kaiser et al. 1997, 152–157, Abb. 18.
279. Kaiser et al. 1997, 155. The inscription of Sarenput I mentions the reconstruction of the Heqaib sanctuary, the construction of a house for a priest, and a “drinking place” for Elephantine, which according to the excavators was probably making use of the festival court installations to provide the locals with drinking water. It is rare to find any indications about facilities for public use in ancient Egyptian towns and cities.
280. Kaiser et al. 1997, 159.
281. Kaiser et al. 1997, 159–161.
282. von Pilgrim 2006, 413; von Pilgrim 1996, Abb. 39; and Kaiser et al. 1997, 153, Abb. 18.
283. Franke 1994, 31–32. The cult of Heqaib started to evolve into a more official cult and was increasingly acknowledged by the state and received royal patronage.
284. For details about the history, function, and votive offerings, see Franke 1994. During the 12th and 13th Dynasties, it was not only the local leaders such as the mayors and overseers of priests who erected their statues and those for their fathers but also a large number of high officials attached to the royal residence and palace administration of the central government. Many of these officials were linked to royal expeditions or held administrative positions with duties in Lower Nubia and would have passed through Elephantine; see, op. cit., p. 90–93.
285. For the sequence and development of the Heqaib sanctuary, see also von Pilgrim 2006, 412–417, Abb. 4–8.
286. Franke 1994, 91.
287. Franke 1994, 46, 82.
288. Alliot 1935; Michalowski 1950, 35–61; and Moeller 2005.
289. von Pilgrim 1996, 149–156.
290. von Pilgrim 1996, 151, Abb. 60a.
291. See von Pilgrim 1996, 39–44. H2 is referred to as a sanctuary that was corrected in later publications to “governor’s palace”; see von Pilgrim 2001, 164–166.
292. For the earlier development, see Sections 5.4.1.4 and 7.4.2.
293. von Pilgrim 1996, 31, Abb. 3, Taf. 6a; von Pilgrim 2006, 411.
294. von Pilgrim 1996, 39–40, Abb. 3, 4 and 7.
295. von Pilgrim 1996, 41, Abb. 7.
296. von Pilgrim 1996, 44–45, Abb. 9.
297. von Pilgrim 2010, 260. According to more recent archaeological investigations, this administrative complex might have been rebuilt at the end of the Middle Kingdom.
298. See, for example, the organization at Lahun as described in this chapter but also the continuity of official buildings with administrative functions at Tell Edfu (see Section 8.5).
299. von Pilgrim 1996, 268–274; von Pilgrim 2001, 171–172.
300. For the archaeological details and general evolution of this building, see “Further discussions,” Section 8.V.1.
301. von Pilgrim 1996, 86, Abb. 25.
302. See von Pilgrim 1996, 197, Abb. 85 for examples of courthouses at Elephantine.
303. For the analysis of house layouts at Elephantine, see Sections 9.1.1 and 9.7.
304. In that respect, they compare well with the storage installations of H86, which was the predecessor building to

- H84 dating to the early 12th Dynasty; see von Pilgrim 1996, 79–80, Abb. 23.
305. See tab. 7 and 8 in von Pilgrim 1996, 233. The problem is that the calculation of the area in square meters is much less informative than a calculation of the possible volume. The bad preservation of these storage installations within H84 has made any further estimate as to their capacity impossible. Nevertheless, the area calculation is relatively useless for any significant conclusion.
306. At Tell Edfu, two of the large silos already cover the same area as the installations of H84. See Moeller 2010, 87–98.
307. See, for example, the storage facilities described in Kemp 1986.
308. Abd El-Maksoud 1998, 50–52, 59–61, 113–115; see also figs. 12, 15, and 19.
309. von Pilgrim 1996, 86, Abb. 25, 97–98. The author refers to it as an example of a “tower house”; see p. 231–232. However, the evidence remains inconclusive because the preserved wall remains make a precise reconstruction of the layout and function of H85 almost impossible. See also “Further discussions,” Section 8.V.
310. For additional details on the problem relating to the stratigraphic link between these two structures here, see “Further discussions,” Section 8.V.
311. von Pilgrim 2001; von Pilgrim 1996, 234–274; see esp. 257, Abb. 110.
312. Von Pilgrim states that they were found in the filling of the foundations (Fundamentverfüllung) of H85 and explains that this fill, which contained the sealings, had been dug up somewhere in the vicinity of H84; see von Pilgrim 1996, 254. In a later article, he further elaborates that this largest sealing deposit was found in “tertiary position” but might have come from a predecessor building of H84; von Pilgrim 2001, 167–168.
313. von Pilgrim 1996, 258.
314. See for example Smith 1990, 211, 215; Wegner 2001a, 78–80, fig. 1.
315. Somaglino 2010, 386–392.
316. Somaglino 2010, 351–382.
317. McDowell 1990, 93–105; Ventura 1987.
318. McDowell 1990, 94. It remains difficult to fully evaluate further how the function of the *khetem* and its personnel evolved from the Middle Kingdom to the later New Kingdom.
319. Cf. von Pilgrim 1996, 267, Abb. 117; see also 268 no. 820. He admits that the very fragmentary state of these sealings does not allow them to be used as conclusive evidence. Furthermore, it has been pointed out that this title is not attested before the New Kingdom; see Somaglino 2010, 391.
320. See Section 7.4.2 for details.
321. von Pilgrim 2001, 166–167.
322. von Pilgrim 1996, 258, fig. 111; Somaglino 2010, 392. Three sealings found in Deposit I, which comes from H12/22 across the street from H2, mention the *khetem* and also several names of local mayors.
323. See, for example, Building A at Wah-Sut or the earlier late Old Kingdom/early First Intermediate Period residence excavated at Balat/Ayn Asil in the Dakhla Oasis; see Sections 7.5 and 9.6.
324. This gate did not seem to exist anymore during the Middle Kingdom.
325. von Pilgrim 1996, 28–30.
326. von Pilgrim 1996, 15, tab. 1, shows the approximate chronology of the various buildings phases that are present within the archaeological record. A “Bauschicht” corresponds to a major building phase. The synchronization of the archaeological evidence to the historical periods and dynasties is still in progress, and this table presents merely the preliminary analysis. Meanwhile, the pottery study from these periods is ongoing and will provide important additional information in the future.
327. von Pilgrim 1996, 223.
328. It has not been possible to excavate a complete building block of each settlement phase in its entirety due to the preservation of the archaeological remains, which have often suffered from leveling operations and the frequent rebuilding of structures.
329. von Pilgrim 1996, 216, Abb. 109, H53, H89, H50 for the 13th Dynasty.
330. See, for example, von Pilgrim 1996, 225, Abb. 90, which shows the development of plots in area B III from the late Middle Kingdom to the late Second Intermediate Period.
331. von Pilgrim 1996, 256–257; compare Abb. 109 to 110.
332. von Pilgrim 1996, 228. In some cases, the external walls were built into a street by about the width of the wall. This did not seem to have been considered as too intrusive.
333. von Pilgrim 1996, 225–228. Von Pilgrim cites several textual sources relating to the buying and selling of plots but also to disputes of heritage.
334. von Pilgrim 1996, 228. See, for example, the evolution of area B IX.
335. See, for example, the development of H81a to H80 in area B IV; see von Pilgrim 1996, 105, Abb. 34; 106, Abb. 35; and 110, Abb. 36, for the time period from the late 12th/early 13th to the 17th Dynasty.
336. von Pilgrim 1996, 225.
337. An good example of such a development can be seen at the modern town of Edfu where the oldest part of the town lies partially on top of the ancient tell site, with streets following a seemingly unregulated course through the town. This stands in sharp contrast to the more recently developed areas stretching to the Nile and to the north and south, which follow a grid layout and an orthogonal organization. See Figure 7.9.
338. von Pilgrim 1996, 223–224.
339. von Pilgrim 1996, 222.
340. von Pilgrim 1996, 223. This concerns the two building phases of the late Middle Kingdom to the early Second Intermediate Period (Bauschicht XIII and XIV).
341. von Pilgrim 1996, 223, Bauschicht XII.
342. Franke 1994, 80–82. The lower part of a seated statue of the temple scribe Khnumhotep, which is currently held in the Louvre (AF 9916), is difficult to date on stylistic grounds because of its fragmentary state. A late 13th or early 17th

- Dynasty date has been suggested. See also Delange 1987, 220–224.
343. Franke 1994, 86.
344. Franke 1994, 86, no. 285; Davies 2003c.
345. See Moeller 2010; Moeller, Marouard, and Ayers 2012.
346. Emery 1979, pl. 16.
347. In several cases, the negative imprints of the columns on the sandstone were visible; see also Moeller 2010, 100, fig. 14.
348. For details on the stratigraphy relating to the abandonment of the southern columned hall and the removal of some of the column bases, see Moeller, Marouard, and Ayers 2012, 94, fig. 5.
349. A good comparison for this layout is the “command building” at the Middle Kingdom fortress of Buhen in Lower Nubia, which features a central columned hall of proportions similar to the one at Tell Edfu; Emery 1979, pl. 16. Another example consisting of multiple columned halls with elongated rooms flanking their sides can be seen at the Middle Kingdom palace at the site of Uronarti in Lower Nubia; see Dunham 1960, map IV.
350. Moeller, Marouard, and Ayers 2012, 91.
351. Moeller, Marouard, and Ayers 2012, 97–99.
352. Only small areas of these underlying structures have been excavated, as it is the aim to preserve as well as possible the columned hall complex of the late Middle Kingdom. No further excavation is planned for the settlement layers underneath it, because this would lead to the inevitable destruction of the later silos and the administrative complex.
353. See Section 7.4.2 for further details.
354. For more details on the chronological implications of the discovery of numerous sealings naming the Hyksos ruler Khayan and the beginning of the Second Intermediate Period, see Moeller, Marouard, and Ayers 2012, 35–42. There is some evidence that the administrative system might not have broken down immediately when the Middle Kingdom capital at Itj-Tawy was abandoned during the mid-13th Dynasty.
355. See Michalowski 1950, 61–100, and Bruyère et al. 1937, 2–17.
356. The recent fieldwork at Hagar Edfu under the direction of Vivian Davies has found a Middle Kingdom tomb (no. 3) and later Second Intermediate Period and New Kingdom tombs in this area, but many of the rock-cut tombs have been severely damaged and are therefore difficult to date further; see Davies 2006, 2008, 2011a, and 2011b for the most recent updates.
357. For some recent reinvestigation of the tomb of Izi by Michel Baud, see Moeller 2005. For a detailed study of the late Middle Kingdom and Second Intermediate Period stelae from Tell Edfu, see Vernus 1988 and Marée 2009.
358. This work is currently in progress, and especially the precise chronology of these two walls is under investigation, because it might be possible to refine this first dating to more specific dynasties.
359. See Section 7.4.3 for details about the First Intermediate Period enclosures.
360. See Davies 2003c, 2003b, and 2003a.
361. Gabra and Farid 1981, 182.
362. Eid and von Falck 2006, 65–66.
363. Arnold et al. 2003, 78.
364. This can also be deduced, for example, from the frequent mention of the title of “overseer of the temple” or “overseer of the priests” that has been found on numerous clay sealings.
365. For concise summaries of the excavation results from each of the different areas at Tell el-Dab’a, see http://www.auaris.at/html/index_en.html.
366. See Section 8.2.1 for further details.
367. Bietak 2010, 13.
368. Forstner-Müller 2010, 119, fig. 12.
369. See Bietak 2005, Bietak 2009b, Bietak 2009a, and Bietak 2010, 15. For a different opinion, see most recently Forstner-Müller 2014.
370. See Section 8.2.2 for further details.
371. Bietak et al. 1998.
372. Bietak 2010, 16.
373. Forstner-Müller 2010, 107. The exact stratigraphic relation of this settlement to the temple is not yet clear.
374. The precise purpose of these state-planned settlements is not quite clear yet, but there is no evidence for specific industrial activities or an involvement in monumental building projects. The houses at Ezbet Rushdi resemble what could be expected for simple “farmhouses” with storage facilities and open courtyards; see Czerny 2010.
375. For further details, see Section 9.2.
376. For further details about the cemetery evidence, see Schiestl 2006, Schiestl 2008, and Schiestl 2009.
377. Bietak 1996, 10–21.
378. Bietak 1996, 21–30.
379. See Eigner 1996. For a detailed analysis of this palatial complex, see Section 9.2.
380. Bietak 1996, 22–26, pls. 11–12; Hein, Mlinar, and Schwab 1994, 39–40.
381. Hein, Mlinar, and Schwab 1994, 40.
382. Schiestl 2002.
383. Bietak 2010, 17–18, fig. 13. See also Section 9.2.
384. Bietak 2010, 17–18, fig. 14; Bietak 2010, 11.
385. The doctoral thesis by Miriam Müller has focused on this residential quarter and provides an in-depth analysis of the houses and their inhabitants; see Müller 2012.
386. About the layout and types of buildings, see details in Section 9.2.
387. Bietak 2010, 18; Bietak 1996, 49.
388. Bietak 1996, 36–41.
389. Hein, Mlinar, and Schwab 1994, 42–43.
390. It has the form of a so-called Breithaustempel (“broadhouse” temple).
391. Bietak 1996, 48, fig. 39.
392. Redford 1996.
393. Hartung et al. 2007.
394. El-Sawi 1979, van Siclen III 1996, and Bietak and Lange 2014. There has been no archaeological data for the town as a whole, which makes it impossible for any further evaluation as to its layout and urban character. For details

- on the Middle Kingdom palatial complex at Bubastis, see [Section 9.3](#).
395. Bietak [2010](#), 25–26.
396. See discussion by Ben-Tor [2007](#), 185–193, who has presented some arguments for a Canaanite/Palestinian background of the inhabitants at Tell el-Dab’a.
397. Hein, Mlinar, and Schwab [1994](#), 40.
398. Hein, Mlinar, and Schwab [1994](#), 40–41.
399. See details in [Section 9.2](#).
400. See [Section 9.3](#) for further details and analysis.
401. Pathways and streets are indicated on the published plans, but there is no evident hierarchy or pattern of main and side streets; see [Figures 9.6 and 9.8](#).
402. A good example in this regard is the tomb of Sarenput II at Qubbet el-Hawa, who was mayor of Elephantine and who had close contacts to the 12th Dynasty kings, especially Senwosret II; see Franke [1994](#), 37–39.
403. See also Müller [2014](#).
404. This is also closely paralleled by the New Kingdom workmen’s village at Tell el-Amarna.
405. O’Connor [2009](#), 105–110.
20. Arnold and Arnold [1979](#), 25.
21. See, for example, Pye and Tsoar [1990](#), 296. Natural gravel and crushed-rock covers on dune surfaces have proven to be an effective measure to stabilize sand dunes. For the effectiveness of cutting trenches through the dune center, see Watson [1985](#), 246.
22. Frey and Knudstad [2008](#), 29. For a detailed presentation of some selected architectural features related to this enclosure, see Arnold [2005](#), 84.
23. Arnold [2005](#), 84.
24. See Arnold [2005](#), 84, fig. 4a–d.
25. Arnold [2005](#), 80–83, see also fig. 2b.
26. Arnold [2005](#), 82–84, figs. 4c and 4d.
27. Frey and Knudstad [2008](#), 44–45.
28. Frey and Knudstad [2008](#), 54 fig. 35.
29. Frey and Knudstad [2008](#), 33–35, figs. 7 and 8.
30. Frey and Knudstad [2008](#), 42.
31. Frey and Knudstad [2008](#), 42–43, fig. 19.
32. Frey and Knudstad [2008](#), 43, fig. 21.
33. Frey and Knudstad [2008](#), 44, figs. 22 and 23.
34. Frey and Knudstad [2008](#), 54, fig. 35.
35. Frey and Knudstad [2008](#), 45, see fig. 24.
36. Frey and Knudstad [2008](#), 46–47, fig. 25.
37. Frey and Knudstad [2008](#), 63–70.
38. Frey and Knudstad [2008](#), 66–68, figs. 45 and 49.
39. Frey and Knudstad [2008](#), 69. The authors state: “Although no extensive clearance of the areas N and S of the stairs were undertaken (these being obscured by Petrie’s widespread dumps), those areas of bedrock exposed in their vicinity do show that surfaces had been leveled and bore patches of mud floor plaster. . . . These surfaces are similar to those encountered at intervals along the exterior of the N enclosure wall (where they included mud floors, thin stratified materials and sherds, engaged with the secondary exterior stairs and traced in some instances over 5.0 m beyond the N wall). These exterior surfaces suggest busy contemporary domestic activities outside the town walls.”
40. Frey and Knudstad [2008](#), 49, figs. 28–29.
41. Frey and Knudstad [2008](#), 49–50, fig. 31. This reed matting would make an excellent sample for radiocarbon dating, because it can be considered a “short-lived sample” that offers much accuracy in terms of dating.
42. Frey and Knudstad [2008](#), 49. Such a regular renewal of mud floors has also been observed, for example, at the administrative building at Tell Edfu, where it dates to the same period. This feature provides some evidence about the relatively long use of this structure.
43. Frey and Knudstad [2008](#), 52, 54, fig. 35.
44. Frey and Knudstad [2008](#), 55–56; see also 53, fig. 34.
45. Frey and Knudstad [2008](#), 56. Similar cellars cut into the natural bedrock have been observed elsewhere on the site.
46. Frey and Knudstad [2008](#), 57, fig. 36.
47. On recent satellite images and on the plan published by Frey and Knudstad [2008](#), a diagonal line through a heap of sand or excavation debris can be seen. The Canadian mission does not seem to have cleared the area in any way. Petrie also notes an open space here and the remains of a building that

FURTHER DISCUSSIONS AND ARCHAEOLOGICAL DETAILS RELATING TO CHAPTER 8

1. See [Section 8.2.3](#).
2. Śliwa [1992](#).
3. Śliwa [1986](#), 174, Abb. 6, Taf. 24 and 25; Śliwa [1992](#), 523–524.
4. Czerny [2010](#).
5. Bietak [2010](#), 17, 39, figs. 12, 13.
6. Wegner [2007](#), 370, fig. 163; 376–378, fig. 165.
7. Arnold [1991](#), 6, fig. 2.
8. Bietak [2010](#), 38, fig. 12.
9. See Śliwa [1986](#), 174, Abb. 6 and Taf. 24, 25.
10. This has already been suggested by A. Hesse, who pointed out that undulating walls can be built very quickly and provide good stability; see Hesse [1970](#).
11. Wegner [2007](#), 378.
12. Śliwa [1986](#), 171; Śliwa [1988](#), 189, mentions “*two urban complexes situated at the foot of the temple*.”
13. The mud-brick enclosure wall has been described in terms of a fortification; see, for example, Śliwa [1986](#), 169–174. The author uses the terms “Wehrmauer” and “Festungsmauer,” which are not appropriate for an enclosure of less than three meters in width without any further attributes that can be linked to a wall of fortified character such as buttresses, a glacis, or crenellations – prominent features of the well-fortified Nubian forts.
14. Śliwa [1986](#), 168–169, Abb. 1.
15. Arnold and Arnold [1979](#), 24–25, Taf. 18.
16. Śliwa [1986](#), 169; Harrell and Bown [1995](#), 85–89.
17. Harrell and Bown [1995](#), 85, fig. 18.
18. Harrell and Bown [1995](#), 88–89.
19. Dagnan-Ginter et al. [1984](#), 65–67, fig. 22.

- had been covered by 12th Dynasty pottery, which lead him to conclude that it had been of official nature and of limited use; see Petrie and Sayce 1891, 7.
48. Frey and Knudstad 2008, 62, fig. 40.
 49. Some of the small houses in the eastern part of the town, east and south of Mansion 9, have entrances on their western sides, as do also some midsize houses of the western extension near the eastern dividing wall; see Figure 8.26.
 50. Frey and Knudstad 2008, 60, fig. 38 and 62, fig. 40.
 51. Wegner 2001, 292.
 52. Wegner 2001, 292–294. He suggests that this happened within 10–20 years of the occupation of this building, dating to the late 12th Dynasty.
 53. Wegner 2001, 293–296, see also fig. 7.
 54. Wegner 2001, 296.
 55. Wegner 1998, 15, fig. 8.
 56. Wegner 1998, 17, 31; Wegner 2001, 297.
 57. Wegner 2001, 296. Wegner dates the pottery from the flour facility to the reign of Amenemhat III and compares it to ceramics of Bauschicht 13 at Elephantine, which von Pilgrim dated to the last third of the 12th Dynasty. However, this needs to be slightly corrected, as comparative pottery from other sites in Egypt prove that Bauschicht 13 continued well into the 13th Dynasty. Building C was built after the flour facility had fallen out of use.
 58. This observation has led J. Wegner to suggest that the main entrance to Building A must have been to the north, a fact he was able to verify in 2004; see Wegner 1998, 17, and Wegner 2006, 34.
 59. Wegner 1998, 31–32.
 60. Wegner 1998, 31.
 61. Wegner 1998, 31.
 62. Wegner 2004, 227.
 63. Wegner 1998, 228, fig. 3; Wegner 2001, 291, fig. 6.
 64. Wegner 2006, 33–34.
 65. Wegner 2004, 223. There is evidence that several king's daughters with this name seem to have existed, and they can all be dated to the mid-13th Dynasty.
 66. For discussion and problems related to this interpretation, see "Further discussions," Section 8.V.
 67. von Pilgrim 1996, 72, Abb. 20; 85. When building H81 of the following phase was constructed, the eastern part of H84 saw a destruction of all its corresponding floor levels and the layers linked to its use.
 68. Cellar 0212 was already constructed during the last phase of the older building, H86a; see von Pilgrim 1996, 79, Abb. 23.
 69. von Pilgrim 1996, 88, SVK 21; see also 257, Abb. 110, which records 58 sealings in this deposit. Von Pilgrim links this context to the use of building H84, during which the broken clay sealings were discarded in this storage installation that by this time was not in use anymore. This would, however, reduce the storage function within the courtyard of H84, which has been emphasized by the excavators.
 70. Room D was filled up by the vaulted cellar and room B was fronted by the courtyard cellar (bin) on its northeastern side, which leaves room C as the best option for a doorway.
 71. von Pilgrim 1996, 90. The author suggests that grain was stored in bags within this cellar.
 72. von Pilgrim 1996, 90.
 73. von Pilgrim 1996, 92, Abb. 26.
 74. von Pilgrim 1996, 91; see also 92, Abb. 26.
 75. von Pilgrim 1996, 79, Abb. 23.
 76. von Pilgrim 1996, 97. This is not a lot of evidence, unfortunately.
 77. Its internal sides measure only 3.8 m by 4 m; see Figure 8.44.
 78. A good example of a Pharaonic period staircase construction, which resembles H85 a little bit, was found in one of the houses at the Amarna workmen's village; see Kemp 1986, 14–19, esp. figs. 1.11 to 1.13. Normally, such a staircase would lead to an upper floor or roof, which in H85 is difficult to relate to. Because H85 lies next to the open court of H84 and a large room (E), which might not have been entirely roofed either, it is not clear where such a staircase would have led.
 79. von Pilgrim 1996, 97–100; see also Abb. 29 for the stratigraphic record.

9 HOUSE LAYOUTS IN THE MIDDLE KINGDOM

1. See, for example, the studies by Bietak 1996b, Endruweit 1994, Arnold 1989, Ricke 1932, and Tietze 1996. While Amarna does not constitute a Middle Kingdom example, it has frequently served for comparisons because the core units of many houses at Amarna are closely linked to the evolution of domestic buildings from the late Middle Kingdom onward.
2. For a study of house layouts according to pictorial evidence, see Roik 1988 and Badawy 1948.
3. See, for example, von Pilgrim 1996b, 192–195.
4. Dunham 1960, 6–13. There is little to no description of any traces of activity patterns from the occupation of these room groups that could provide further information about their use. See also Smith 1990, 209, who designates some of the room groups at Uronarti as "private apartments."
5. See Smith 1995, 53–66.
6. Bietak 1996b; Müller 2012, 41–54. I would like to thank Miriam Müller for allowing me to use her extended version of Manfred Bietak's typology. The following outline of house types is based on her analysis.
7. Czerny 2010.
8. Ricke 1932, 15–20.
9. See von Pilgrim 1996b, 190–193, and von Pilgrim 1996a, 258–260.
10. See the discussion by von Pilgrim about the possible early origin of this layout; von Pilgrim 1996b, 193–196, Abb. 83; von Pilgrim 1996a, 259, Abb. 5. He also states that not all of his examples are entirely well dated.
11. von Pilgrim 1996a, 259, Abb. 5f.
12. See Section 5.2.3.1 for further details.
13. von Pilgrim 1996b, 196–204, fig. 85. See also the more detailed discussion of Elephantine in Section 9.7.

14. von Pilgrim 1996b, 196–198.
15. The ongoing excavations at Tell Edfu so far have not uncovered domestic buildings of the period in questions but might do so in the future.
16. See Section 6.6.
17. C. von Pilgrim has especially emphasized this finding in his study of the Middle Kingdom and Second Intermediate Period houses at Elephantine; see von Pilgrim 1996a, 264.
18. See, for example, Spence 2015.
19. Picardo 2015.
20. See, for example, the various case studies discussed in Cameron and Tomka 1993.
21. One of the best examples is the governor's palace at Balat/Ayn Asil in the Dakhla Oasis, which was destroyed by a large conflagration at the end of the 6th Dynasty, see Section 6.4.
22. See Section 8.6.
23. Bietak 2010, 34, figs. 9a and b.
24. See Section 8.2.1.
25. Czerny 2010. See also Section 8.2.2 for additional information and discussion.
26. Czerny 2010, 75.
27. Bietak 1996a, 10. Bietak cites as references two examples of this type of architecture: the palace of Mari, which is roughly contemporary but inadequate as a comparison because it can be considered palatial architecture; and an architectural type of the 4th millennium BCE, which is also highly problematic as comparative material to the Middle Kingdom evidence from Tell el-Dab'a, which dates to the 2nd millennium BCE. For the latter, see the typology made by O. Aurenche of Near Eastern houses, in which he calls this type of building "plan pluricellulaire complexe, type Obeid"; see Aurenche 1981, 201–202.
28. This might not be as foreign as we think. Archaeological evidence at Elephantine shows a rare example where a tomb of a female adult had been constructed within a room of a domestic building during the Middle Kingdom; see von Pilgrim 1996a, 78–82. That discovery shows that the separation between burial grounds and settlement was not always as strict as has often been assumed. The expanding settlement could well have been infringing upon local cemeteries when overall settlement space was getting increasingly restrictive due to the island location.
29. Bietak 1996a, 11, fig. 7.
30. See Bietak 1996a, fig. 8; Bietak 1984, Abb. 3. The doorways are not clearly marked on the plan, which makes a secure identification of the access pattern difficult.
31. Bietak 1984, 324, Abb. 3; Bietak 2010, 38, fig. 12.
32. Foucault-Forest 1997.
33. Foucault-Forest 1997, fig. 3.
34. Bietak 1996a, 14–15, fig. 11.
35. Hein, Mlinar, and Schwab 1994, 39.
36. Bietak 1996b, 24, figs. 3 and 4.
37. Bietak 2010, 17–18.
38. This layout is also known for small sanctuaries and chapels. See, for example, the Second Intermediate Period *ka*-chapel dedicated to the priest Sobekemsaf at Elephantine, at Section 8.4.2. See also Bietak 1996a, figs. 39–40.
39. Müller 2012, 57.
40. Müller 2012, 59–60.
41. Müller 2012, 63.
42. Müller 2012, 66–68.
43. Müller 2012, 49–50.
44. Bietak 2010, 41, fig. 15.
45. Müller 2012, 71–72.
46. Bietak 2010, 18–19. See also Section 8.6.
47. Bietak 2010, 42, fig. 16.
48. Hein, Mlinar, and Schwab 1994, 41. See also http://www.auaris.at/html/stratum_b.html for further details. This might be a sign of a gradual "Egyptianization" of the inhabitants.
49. Eigner 1996.
50. Eigner 1996, 75. Eigner suggests that there were dressing rooms according to the presence of a mud-brick bench and footrest. No evidence for any bathroom installation was found here.
51. Eigner 1996, 76.
52. Eigner 1996, 80.
53. Building A covers an area of more than 4,000 m².
54. For the excavation reports, see van Siclen III 1996, Bakr 1982, and Farid 1964. More recently, see also Bietak and Lange 2014.
55. Bakr 1982, 154, fig. 14.
56. See, for example, Newberry 1893, pls. XXIII, XXIX; Badawy 1948, 121–122.
57. See Section 5.5.1.
58. The width of the western wall of hall (f) measures more than 5 m; see Bakr 1982, fig. 13.
59. van Siclen III 1996, 244, fig. 9.
60. van Siclen III 1996, 245, fig. 11.
61. This remains a hypothesis so far, but the very thick walls and the monumental size and decoration of the rooms in this part of the palace are quite unusual and have no parallels at any other Middle Kingdom sites in Egypt. See also Farid 1964, 94–95.
62. The archaeological evidence at Ayn Asil also shows that the *ka*-chapels had thicker walls than the remainder of the complex.
63. Bietak and Lange 2014, 6. The tomb complex is clearly visible on the published satellite image to the east of the large Middle Kingdom palace.
64. Farid 1964, 86–90, figs. 1–4.
65. See Lilyquist 1974.
66. van Siclen III 1990, 189.
67. Farid 1964, 86–90, figs. 1–3; van Siclen III 1990, 187–194.
68. Farid 1964, 92–94.
69. This is the reason the site does not feature in Section 8. There are many indications for its existence – such as large quantities of ceramics and various inscribed stone elements – but today the town seems to be buried under thick layers of alluvium and remains outside the reach for any large-scale excavation. See Arnold 1996, 13; Lorand 2013.

70. Arnold 1996, 16, fig. 4. A. Mace excavated this area first, in the 1920s, but F. Arnold reinvestigated it in 1991.
71. Mace 1921, 17.
72. Mace 1921, 15. From the published plan, this interpretation is not really verifiable.
73. Arnold 1996, 15, no. 18.
74. Arnold 1996, 19. There is currently no precise stratigraphic data available for these buildings that could help to elucidate the precise construction sequence and alterations of their interior layout. The inaccessible back room linked through a small window with the central room (m) is strange and implies that the western wall of room (n) might be a secondary addition.
75. Arnold 1996, 18, fig. 5 a.
76. Arnold suggests that corridor (e) was a “scribal or priest’s office” and that the platform would have been used to sit on. However, no supporting evidence for this interpretation has been found during the excavations; see Arnold 1996, 19.
77. Arnold 1996, 18, fig. 5b.
78. Arnold 1996, 19. Arnold points out that this abandonment during the early Second Intermediate Period seems to also have happened at Kôm el-Rabi’a at Memphis around the same time, while the town of Avaris at Tell el-Dab’a in the eastern Delta grew considerably. He suggests that there has been “a demographic shift at the beginning of the Second Intermediate Period.”
79. Arnold 1996, 19.
80. Arnold 1996, 19. For example, some wooden spindle whorls, small limestone weights, and fragments of crucibles were excavated. Any tools associated with agricultural activities remain rare. A more unusual find is a piece of pumice, which could have been traded from the Delta region. Some of the pottery vessels stem from Levantine imports (Palestine and Cyprus), but Nubian wares were also present.
81. See, for example, Kemp 1989, 149–157, Bietak 1996b, and more recently Doyen 2010.
82. This would fit the information from the textual sources found at this site; see, for example, Kemp 2006, 220–221.
83. Kemp 1989, 155.
84. Wegner 2004.
85. von Pilgrim 1996b, 190–193, and von Pilgrim 1996a, 258–260.
86. von Pilgrim 1996b, 191, Abb. 81.
87. von Pilgrim 1996b, 210.
88. von Pilgrim 1996b, 217.
89. von Pilgrim 1996b, 213.
90. von Pilgrim 1996b, 202, no. 555; see also tab. 4.
91. von Pilgrim 1996b, 191, 211, Abb. 81.
92. See, for example, the discussion of New Kingdom houses at Amarna and the archaeological evidence for possible second floors: Spence 2004, 125.
93. von Pilgrim 1996b, 216.
94. von Pilgrim 1996b, 203, Abb. 89, which shows the difference in room arrangements.
95. von Pilgrim 1996b, 201–203. He acknowledges that his term “courtyard-house” might not be the most ideal one because it does not take into account that in some cases the central court could have been a roofed hall.
96. von Pilgrim 1996b, Abb. 65, which shows the entire housing block west of the Heqaib sanctuary during the Second Intermediate Period (Bauschicht 11).
97. While about 110 houses have been partially excavated and identified, only 16 houses were excavated to their full extent; see von Pilgrim 1996a, 256.
98. von Pilgrim 1996b, see Abb. 81 and 85.

10 FINAL CONCLUSIONS

1. de Miroschedji 2009.
2. Probably the most famous discussion in this respect was delivered by John Wilson in Kraeling and Adams 1960, 124–136.
3. Kemp 1977; Samuel 1999.
4. Kemp 1977, 128. Kemp points out in his investigation of the Amarna suburbs that “it has been difficult to decide on house size alone where some specific aspects of social divisions lay, particularly between the literate ‘officials’ and others.”
5. A good example of this are the bakery facilities at the New Kingdom city of el-Amarna, where in order to create a bread-making facility on an industrial scale, the bakery units were multiplied until the necessary capacity was reached, creating a large block of temple bakeries; see Kemp 1989, 289–191, fig. 96.
6. Rural society is understood here in terms of agricultural production as the main focus of these people who were part of a locally self-sufficient economy without exhibiting much social stratification; see Eyre 1999, 36.
7. See discussions by Eyre 1999; Lehner 2010.
8. For the rich documentation concerning its cultic role, see Raue 1999.
9. From the currently available evidence, it is difficult to evaluate how such cities could change and evolve with regard to these functions.
10. Lehner 2011, 40–41.
11. Lehner 2000, 277.
12. Kemp 1989, 305–312.
13. Samuel 1999.
14. See further discussion by Kemp 1989, 64–65.
15. Roaf 1990, 81; Stone 2007a, 167.
16. Moeller 2008, 64–66, fig. 5.5.
17. Henne 1924, 2, fig. 1.
18. Moeller 2008, 67–68.
19. Aly 2005.
20. Oppenheim 1969.
21. Stone 2007a.
22. Stone 2007a, 163.
23. For such examples of residential neighborhoods in the Diyala region, see Henrickson 1981 and Henrickson 1982. Luby 1991 provides examples from the city of Ur. For a study of residential quarters at Nippur, see Stone 1987, esp. 126–127; also Stone 1996, 233, and Stone 2007b, 217.
24. Müller 2014.
25. Kepinski-Lecomte 1996.

26. Stone 2007a, 163.
27. Stone 1987, 125. The excavations of residential neighborhoods at Nippur provide new evidence for the emphasis on literacy and scribal education. For perspectives on literacy, see Baines 2007, 64–73. His working model estimates literacy in Egypt to have been at about 1% of the population.
28. Stone 2007a, 164.
29. Stone 2007b, 218–219, fig. 50.
30. Stone 2007a, 163.
31. Stone 2007b, 219.
32. Stone 2007a, 169–170. She emphasizes that the “population of Mesopotamian cities seems to have been very agrarian, with well over 50% of the population making their living through agriculture, so was the rural sector very urban.”
33. Stone 2007a, 169. She cites the case of the two excavated villages of Tell Harmal and Haradum as representative examples.
34. Stone 2007a, 163–164. For the presence of a possible commercial bakery unit and chapel within a residential town quarter at Nippur, see Stone 1987, 55, 86.
35. Seyfried 2012.
36. Stone 2007a, 162; Woolley and Moorey 1982, 198.
37. It is possible that these linear houses were in fact subdivisions of former courtyard houses, as they are often found in groups of two or three; see Stone 1996, 232.
38. The House Unit 3 at the site of Heit el-Ghurab is one of those examples; see Figure 6.8.
39. Moorey 1987.

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